

AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

FEBRUARY 1, 1937



Enkianthus Campanulatus

**Ohio State Short Course
Trends in Ornamental Plantings
Native Plants of Garden Value**

AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

F. R. KILNER, Editor
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CONDENSED DATA.

Four pages of this issue carry report of the short course for nurserymen and landscape gardeners at Ohio State University last month. Yet it is not a lengthy report, but rather a series of short summaries of a number of topics of prime interest discussed during the sessions. These condensed data will bear careful reading, for there are a number of valuable suggestions.

These aids to better and more efficient ways of propagation and culture are especially worth while when nature, in one way after another, curtails the supply of nursery stock. First drought in the central west, then freezing weather on the Pacific coast and now floods in the Ohio valley are taking their toll. Not only are nursery supplies consequently shortened, but the demand for planting stock is increased.

ADVERTISING ROSES.

If plant patents had no other merit to recommend them, they would be a boon to the nursery industry by making possible such advertising as is exemplified in the 1937 edition of the booklet, "All about the New Roses," by Jackson & Perkins Co., Newark, N. Y. This 24-page booklet, supplementing the national magazine advertising of this wholesale rose firm, pictures nineteen patented roses in colors, several in full-page plates. And no finer color work, it can certainly be said, has been employed in any advertising piece, whether it be

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that of a million-dollar automobile manufacturer, exclusive jewelry house, or what you will.

A half-dozen pages are devoted to instructions as to planting garden roses, the use of climbers, wintering plants and other cultural data. Diagrams and sketches make these brief notes quickly understandable.

Of the nineteen patented roses pictured, Eclipse, the brilliant new yellow that won the Bagatelle gold medal, adorns the front cover. Among the others most conspicuously illustrated are Blaze, everblooming hardy scarlet climber; Princess van Orange, orange scarlet rambler; Doubloons, yellow climber; Signora, everblooming polychrome orange, first winner of the Colle Oppio gold medal at Rome, which Eclipse won later; Gloaming, robust salmon-pink; Radiant Beauty, a red rose related to Radiance and reminding one in form and fragrance of American Beauty.

Plants for the garden will be more cherished things when they are the subject of advertising material such as this booklet devoted to roses.

HOW NOT TO ADVERTISE.

Nurserymen need advertising, no question about it, and the more they do, the better for the whole industry.

The most suitable and most effective ways require development and study, particularly by those not experienced in merchandising.

But there are ways not to advertise, for every shotgun has two ends, and one should not get in the way of the wrong one.

Recently a nurseryman sent out a handsome little folder advertising his landscape service. It was an expensive thing, well illustrated, and presented a good deal of "class." Included in it, however, was the statement that the circular was good for a credit of \$25 on an initial order of \$100 given for landscape materials or services.

The reaction of home owners was interesting. They did not give the nurseryman any credit for generosity. They wondered how there could be so big a margin on any job to permit that credit.

Surely, any impressions that our

merchandise is overpriced should be avoided. Too much of it is underpriced.

ENKIANTHUS CAMPANULATUS.

Experience with *Enkianthus campanulatus* under various conditions is refuting some of the first-formed notions about this interesting shrub introduced from Japan. Being an ericaceous plant, it was naturally expected to require an acid soil, but it has been grown satisfactorily in non-acid soil in New York state. However, in limestone regions specially prepared soil, such as that used for azaleas, rhododendrons, kalmias, etc., will likely give best results.

This shrub was formerly considered fairly tender, but has lately been allocated to zone 3 and southward. It thrives in Massachusetts. The shrub's slow growth and its tendency to be leggy, due to the leaves' appearing in clusters at the ends of the shoots, are the plant's greatest drawbacks. It is believed, though, that proper pruning may overcome the legginess. Also, the shrub resents root disturbance and should be left alone when once established.

Redvein *enkianthus*, the common name, is appropriate, because the small nodding yellow to pale orange flowers are noticeably marked with red veins. The blooms appear in May, quickly followed by capsule-like fruits. The brilliant red autumn foliage is another attractive feature, the leaves holding on late. As generally seen in gardens, this *enkianthus* rarely exceeds a height of six feet, though it reaches thirty feet in Japan.

Propagation is possible with seeds sown in spring and handled much as are those of azaleas, with hardwood cuttings placed under glass in fall or spring, with green wood cuttings taken in summer and with layers put down in spring.

LOOKING at the garden advertising pages of some of the home magazines, one is tempted to remark that a mail-order house that avoids reverse plates will, by being different, get the extra attention that those black patches strive to secure.

AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

The Chief Exponent of the American Nursery Trade

*The Nurseryman's Forte:
To Make America More Beautiful and Fruitful*

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Ohio State Short Course

*Summaries of Numerous Informative Lectures and Discussions at the
Nurserymen's and Landscape Gardeners' Two-day School at Columbus*

The large attendance at the 1937 nurserymen's and landscape gardeners' short course at Ohio State University proved that practically all those who had attended the courses at Columbus in previous years were so enthused that they not only returned this year, but brought some of their neighbors and friends in the trade with them. Seven states in addition to Ohio appeared on the registration list, which was signed by 125 members of the trade.

A greeting from Prof. L. C. Chadwick, of the university, opened the course Wednesday morning, January 20.

Hardy Chrysanthemums.

He introduced William P. Robinson, of the university floriculture staff, who took the place of G. H. Poesch as the first speaker on the program and discussed "The Propagation, Culture and Choice of Hardy Chrysanthemums."

Concerning their propagation four methods were suggested: Lifting the clumps early in November, placing in a cool greenhouse or frame and keeping on the dry side till February; removing the plant stolons after the first heavy frost, placing in flats and holding over in a frame or greenhouse; lifting the old plants in the spring, removing each side shoot and potting up or planting in flats; taking stem or leaf cuttings, a method used on expensive varieties or when heavy increase in production is desired.

Soil for hardy mums should contain plenty of organic matter and be moderately high in plant nutrients;

a silty loam soil is satisfactory. Add four to five pounds of superphosphate per hundred square feet before planting. Plant after danger of frost, usually in May, setting twelve to fifteen inches apart. Keep soft pinched until July 15 to August 1. Spray with Bordeaux mixture as a control for leaf spot. Sterilize potting and field soil or rotate crops to avoid stem rot. Use caution in watering and spray with nicotine to check leaf nematode, though if plants are badly infected they should be destroyed.

The following list of satisfactory varieties compiled by Mr. Poesch was read by the speaker: White—Normandie, September Queen, Jean Cumming, Winnetka, Ruth Hatton, Irene. Yellow—Barbara Cumming, Improved Wolverine, Glomoro, R. Marion Hatton, Alice Howell, Yellow Gem, Improved Rodell, Yellow Dot. Bronze—Aladdin, Early Bronze, Alice Barham, Chestnut Burr, Sonoma, Evelyn, Frances Whittlesey, Sunkist, Granny Scovill, Indian Summer, Ethel. Pink—Amelia, Glada, Provence, Albert Muller, Eden, October Girl, Jean Treadway, Olga, Murillo, Ganna, Rosy Gem, Ermalinda. Red—Adelaide, Ruth Cumming, Vivid, Romany, Muldoon, Red Flare, Hilga.

Of the single type, the following were suggested: White—Innocence, Donald Wells, Princess. Yellow—Orion, Alice Howell, Sunbright, Ceres. Pink—Daybreak, Dazire, Daphne, Diana. Bronze—Apollo. Red—Crimson Splendor, Gypsy Girl, Dazzler, Louise Schling, Grenadier, Cavalier, Mars.

Clarence O. Siebenthaler, presi-

dent of the American Association of Nurserymen, in his discussion of "Organization" showed the dire need of coöperative action among nurserymen. While matters of production, distribution, employment and finance can be regulated individually or in sectional groups for the most part, federal government activities demand national organization if nurserymen are to keep from being taxed beyond their ability to pay. To illustrate this he mentioned the Robinson-Patman act, the several Patman bills which are about to be introduced, the Walsh-Healy bill and the Norris-Jones bill, all of which affect the nursery business and may cost members of the trade thousands of dollars.

Rose Propagation.

The discussion of roses took up the entire Wednesday afternoon session.

Gerard K. Klyn, of Mentor, O., capably handled this subject from the standpoint of propagation. Concerning understocks he made the following comments: Multiflora japonica is the most used commercially, though not entirely always satisfactory. Manetti is good for heavy-producing types. Rugosa is much used in the old country, but suckers badly and is susceptible to diseases and insects. Canina is used in the old country, but unsatisfactory here. Lexa is satisfactory, but does not produce so sturdy a plant as multiflora and Ragged Robin; it is used in California, but is not hardy in Ohio.

Rooted cuttings are preferable to seedlings of multiflora because they are easier to work and give an earlier

growth. Dutch cuttings are preferred, since home-grown cuttings are not yet uniformly graded and may be infested with nematodes. In the budding process, failure may be due to improper selection of bud wood; hard and dormant buds usually give far better success. Budding should be stopped or delayed till as late as September in case the plants are too dry.

The speaker also mentioned the following other important factors influencing success with roses: A good soil is a prime requisite in rose growing; good drainage is important; the soil should test preferably from a pH of 5 to 6 and have a moderate nitrate supply, low to medium phosphorus supply and a medium to high available potash content. The use of a green manure crop in preparing soil should not be underestimated. Pinching of rose plants does not necessarily induce bottom breaks.

Production Costs.

P. R. Bosley, of Mentor, went into considerable detail to describe the efficient system he uses for finding his cost of production of roses. The costs are figured separately for each of the fields in which the plants are grown up until the time they are sold. The total of the costs in each field is divided by the original number of plants which were planted in the first field, and the costs are totaled up to secure the hypothetical cost per plant in any of the three fields, which is the usual number required to produce a finished rose. The average loss of plants at selling time is usually about fifty per cent of the original number started; so the hypothetical cost per plant is multiplied by two to get the actual cost per plant. To this must be added a selling overhead of twenty-five per cent. By keeping close records, the speaker figured that it actually costs 18 cents to produce a rose plant ready for the consumer.

"Choice of Present-day Varieties" was exceptionally well handled by Robert Pyle, of West Grove, Pa. He stated that since there are some 2,000 varieties of roses in American commerce alone, it is obviously a big task for anyone to select from that number a preferred list without providing cause for argument. His lists will be presented in these columns later.

Mr. Pyle concluded his discussion with some color slides of many of the varieties he mentioned. In closing,

he stressed the dire need in America of more rose trial gardens.

The following were among the many points brought out by Prof. Wilber Stout, of the state geology department, who is also a rose fancier, in his discussion of "What the Client Expects from Nursery-grown Roses;" An honest description of the plants should be given, including comparative height, the general shape, whether the plants are really new, whether the plants are susceptible to diseases and insects, whether or not they are quite continuous bloomers, whether they change color with the season, whether the buds are perfect and have fragrance or lack it. Likewise, the public wants plants that will grow and be delivered at the optimum time of planting and be rightly labeled.

Roses in Garden.

Robert Bryden, of Cleveland Heights, ably described the "Planting and Care of Roses in the Garden." As to location he suggested an open, sunny and airy situation. Clay soils are preferred and good drainage is essential. Bone meal and either a 10-6-4 or 6-8-6 fertilizer are incorporated in the soil before planting. Fall planting has given best results. The plants are set fifteen to eighteen inches apart, with the bud at the surface of the soil or just under. Keep well watered in the summer; apply complete fertilizer in late June; give a peat, rotted manure or chaff mulch of two to three inches in summer; control insects and diseases. Roses should be protected during the winter by banking with soil to a depth of six or eight inches before the ground freezes and applying leaves or manure after the ground freezes; the plants are uncovered gradually in spring when the buds begin to swell. Prune out the weak wood and cut back the strong growth to four or five eyes after the last frost.

Fruits in Future.

Concerning "Horticulture of the Future," Dr. J. H. Gourley, head of the university's department of horticulture, cited the great strides which have been made in that field in the past twenty-five years. He stated that while the average apple production during the next five years will about parallel that of the past five years because of unusual conditions which

existed in 1934 and 1936, there will be far fewer trees in production, as is indicated by the fact that, while in 1910 there were about 217,000,000 trees in production, in 1930 there were but 116,000,000 and in 1936 the number slumped to 95,000,000. The Ohio, Michigan and New England regions are the only ones which have not slumped in the production of fruit. He stated that in 1935 in Ohio apples made up sixty-eight per cent of the entire fruit crop produced. There must be more apple trees planted in this state, but he suggested that it be done in the sections which have the most suitable soil and growing conditions and the better and more hardy varieties used.

Ericaceous Plants.

Dr. R. P. White, of the New Jersey agricultural experiment station, ably told of "Growth Conditions for Ericaceous Plants." Among points which he stressed as essential to success with this type of plants in the east were good drainage, slightly acid soil, a rather uniform moisture supply and organic matter because of its "buffer action." Rhododendrons and azaleas require the same nutrients as other plants, but prefer their nitrogen in the form of ammonia, and for this reason nitrogen fertilizers should consist of cottonseed meal, tankage, blood or ammonium sulphate or combinations of these. The following formula was given to produce a 5-7-5 fertilizer which has worked well in New Jersey on rhododendrons and azaleas:

	Pounds
Tankage or cottonseed meal (6% N)	650
Ammonium sulphate	200
Ammoniated superphosphate	800
Magnesium sulphate (or oxide)	150
Muriate of potash	200
	2,000

This is usually used at the rate of 1,000 pounds per acre as a side dress in the spring, or twenty pounds per thousand square feet of frame on younger stock. For adjusting soil acidity, he suggested the addition of sulphur, aluminum sulphate or peat with the aluminum sulphate at the rate of three ounces per square yard under New Jersey conditions. He stated that iron deficiency in this type of plants is manifested by dark veins with yellow areas between, while magnesium and nitrogen deficiencies produce a complete yellowing of the leaves, and the lack of manganese is shown by yellow blotching spread

over the leaves. He stated a southern exposure is all right for these plants if they are protected from the sun somewhat, and a northern exposure can be used if they are protected from the wind. He showed slides of rhododendrons in various stages of growth and stated they can be grown satisfactorily in sand or sand peat mixtures when small.

New Propagation Practices.

The Thursday morning session opened with Prof. L. C. Chadwick describing "New Practices in Propagation." In this he reviewed recent experimental work done at various institutions in this country with ornamental seeds, budding and grafting, and cuttings.

He stated that but little experimental work has been done on grafting and budding of ornamentals. The most important advancement to date has been the discovery that in apples in some instances the complete union in grafting is not made as soon as knitting has taken place, but often there is not a full set-up of vascular tissues until the start of the second year's growth. Consequently, since it is highly possible that the same situation exists in many ornamentals, it is important for nurserymen to give their grafted plants particular attention during the first year after grafting.

Concerning cuttings, roots may originate from any layer of cells, but more usually from the cambium layer. The callus is of no importance in the rooting of cuttings and may even retard rooting; the suberin layer is of much more value than callusing. Most nurserymen are using at least a portion of peat in their propagating. The greater majority of shrubs root better if the cuttings are taken just below the node.

Of growth-promoting chemicals, to date indolebutyric acid has given the best general results, while indolepropionic acid seemed to stimulate callusing, and phenylacetic acid produced the most response on bud development. He showed a series of slides which indicated the increase in earliness of rooting on many kinds of ornamental materials after treatment with these substances. He concluded by stating that there is still much to be found out concerning the duration of treatment and strengths of materials to use, but indications so

far are that most of the recommendations have suggested either too high concentration or too long treatment.

Ornamental Plant Diseases.

Dr. R. P. White then made his second appearance on the program with a well rounded discussion of "Ornamental Plant Diseases." The disease problem is one which may prove alarming and costly to nurserymen, since, because of their investment in land and stock, they cannot well change to another location. He stated that nurserymen's plants have four contacts with diseases.

Propagation troubles are first, with damping-off most prevalent.

Losses in field culture are of two types, those attacking leaves and foliage and those attacking roots. The former are rather easily controlled, while root diseases are kept from getting a start by rotating crops, use of green cover crops and resting the soil.

Storage losses are lessened considerably by making sure that only healthy stock is stored and that the wood is well matured before placing in storage; likewise, the relative humidity should not be allowed to get too high and a low temperature should be maintained and plenty of ventilation supplied.

Losses after planting on the job come from diseases such as wilts of maples, elms and shrubs, boxwood canker and brown canker of roses. Although the wilt diseases are hard to control, clean culture will help. Cleanliness, together with a definite preventive spray program, will help considerably in keeping many canker troubles in check. For black spot and mildews, one of the sulphur preparations was recommended. As yet there is no cure for the root rot affecting *Ulmus pumila*, though the spread of it is prevented by pulling out and burning the infected trees. Rhododendron wilt is controlled by placing the young plants out in a coldframe as soon as they are able to stand it, since the fungus causing the disease will not withstand a temperature below 25 degrees.

Harold C. Esper, of the building and grounds department of the university, presented some worth-while information in his talk on "The Plants I Obtain from Nurserymen." The speaker, who has charge of ordering and planting all the nursery stock at the university, pointed out



Nurserymen and Landscape Gardeners in Attendance at Recent Short Course at Ohio State University.

that plants received have often been carelessly dug, not properly shaped or trained, etc. Suggestions given for improvement included more careful digging, proper pruning of root and top, proper spacing of plants in the nursery, following a well rounded fertilizing program, protecting the plants in shipment, using plenty of waterproof labels, furnishing well balanced and well graded plants, discarding antiquated items and those unfit for landscape use from the lists, digging balled and burlapped plants with a generous ball of soil, and maintaining proper storage facilities.

Propagation of Taxus.

The Thursday afternoon program was taken up completely with a discussion of taxus with Dr. L. C. Chadwick as leader.

M. P. Sebian, of Painesville, gave out countless ideas of value concerning the propagation of this genus. He stressed the opinion that it is a decided fallacy to graft taxus, since it does just as well or even better at times on own roots. The speaker mentioned two methods of producing cuttings. The first method consists of taking cuttings of 2-year wood in June or July, sticking them in an outdoor propagating frame and leaving them there till the following July, then setting them out in another shaded frame spaced three inches apart in staggered rows for a year, when they are transplanted to still another shaded frame for another year, after which they are grown for two years in beds in the field and then planted to the nursery row. The other method consists of taking 2 to 3-year wood cuttings from November 15 till Christmas and placing in a 40 to 50-degree greenhouse with bottom heat; the cuttings are removed from the sand usually in July and thereafter handled similarly to the cuttings from the frames. In either case great caution should be used not to overwater cuttings while in the propagating bed.

He suggested stratifying taxus seeds for about twelve months, starting in November; the following November the seeds are mixed with fine gravel and sown in the seed bed and covered with about one and one-half inches of soil. The following spring more soil is placed over any seed requiring covering. After germination, which usually takes place May 1 to 15, sash

is placed over the seed bed, and from then on the seedling plants are treated similarly to the plants from cuttings, with the latter being far more uniform plants than the seedlings.

Taxus in Beds.

Alfred Block, of Cincinnati, followed with a timely discussion of "Transplanting and Culture of Taxus in Beds." He described the construction of beds which he has found satisfactory; these are made of 1x6-inch cypress for sides, fastened to 2x4's, which extend eighteen to twenty-four inches above the sides and to the top of which is tacked No. 9 wire to support the sash and shades. The soil used consists of one which has grown a green manure crop the previous year and to which are applied plenty of organic matter and an abundance of sand as required to insure good drainage. The first year in the beds the plants are set five by twelve inches and kept shaded and hand-weeded, and mulched with straw during the winter. The second year the plants are given their first pruning and are tilled lightly with a cultivator. The third year they are transplanted, the tops and roots being pruned, and spaced seven to eight inches by fifteen inches, with manure and commercial fertilizer added to the soil. During the fourth year less cultivation is required. In general, the plants are transplanted three times before being set out in the field or sent out on landscape jobs, some of the dwarf varieties being kept in beds for five years.

On the trimming, pruning and field culture of taxus, John Siebenthaler suggested the following important considerations: Pruning and shaping the plants, if properly done, improves the condition and usefulness of the plants and corrects injuries due to weather conditions. The plants should be shaped in April, just after growth starts, except after a severe winter. The ultimate use of the plant should be kept in mind in shaping the plants, as, for instance, plants to be used for hedges should be allowed to develop several stems, while if a tall columnar-type plant is desired, but one leader should be allowed to develop. Pruning should take place after new growth is one to one and one-half inches long, and about half of this growth is

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pruned off. He stressed the importance of having one trained man responsible for all the pruning and shaping that is done on taxus. He stated that a well drained and lighter-type soil is much better than a heavy soil for taxus.

Taxus Varieties.

The final speaker of the afternoon, C. E. Kern, of Cincinnati, covered the subject, "Choice of Taxus Varieties and Their Use in Landscape Plantings." The following is a brief résumé of varieties mentioned and a few of their characteristics: *Taxus canadensis*—good ground cover, hardy, must have shade. *Taxus baccata aurea* and *T. baccata repandens*—best of the *baccata* species. *Taxus cuspidata* and its types—the most satisfactory and popular to date. *Taxus media Hicksii*—distinctly columnar and quite hardy. *Taxus media pyramidalis*—a good upright grower with fine-textured foliage. *Taxus Andersonii*—vase-shaped form, fairly rapid grower, color bright green. *Taxus Brownii*—splendid plant, dense, conical growth. *Taxus Halfeldii*—another fine plant, narrow and upright. *Taxus Hunnwelliana*—hardy and good, but discolors in winter. *Taxus Kelseyi*—slow grower, noted for its fine fruiting habit.

Mr. Kern reminded the group that the dwarf yews are valuable, since in the eyes of a plant connoisseur it is their dwarfness coupled with high quality which gives them their worth.

John Siebenthaler suggested that in his opinion many of the so-called media types of taxus do not belong to the media group at all, since the word media indicates a distinct cross between two species and consequently should not be used in connection with any taxus unless it can be definitely proved that that particular type has arisen from such a cross. All those in attendance seemed much in accord with Mr. Siebenthaler's suggestion.

Illustrated Talks.

In the evening were enjoyed two instructive and illustrated talks. The first consisted of excellent movies in full color shown by John Siebenthaler and taken by him of various gardens in the vicinity of Dayton, in particular of oriental poppies, of which his firm lists about 100 varieties. Although it is difficult to select one vari-

(Concluded on page 8.)

Trends in Ornamental Plantings

What the Informed Gardening Public Asks for in New and Rarer Plants, Told New York Nurserymen—By Donald Wyman, of Arnold Arboretum

Modern nurserymen are becoming more and more conscious of the new type of American gardener, that person who is familiar with all the common ornamental plants, but who usually asks for the rarer plant materials when he buys. He wants some of the newer material because it is harder to get, and the chances are that few of his friends yet have such plants. This new or rare material would not necessarily be only recent introductions, but would also include outstanding native plants which simply have been overlooked by the gardening public.

The shingle oak, *Quercus imbricaria*, for instance, is a tree of considerable merit, native in Missouri. It has a good form, the leaves are dark green and shiny, remaining on the tree all winter long, and it will stand clipping well. It makes an excellent hedge and windbreak, yet it is not available in the trade. In October one of the larger nurseries spent over \$50 trying to locate some for a client, without success, and finally had to resort to collecting them in Missouri.

Plants like *Catalpa bignonioides* nana and *Hydrangea* P. G., though they may be bread-and-butter plants to some nurserymen, are beginning to drop in popularity. The public is fast becoming educated to the point where it is demanding better plants. Admittedly, many buyers will continue to ask for the more common plants, but the greater part of the buying public—those people with an increasing amount to spend on plant materials—are beginning to demand the newer plants, and the nurseryman who has them available will be able to attract an increasingly larger and better paying trade.

Certain groups of plants like the philadelphus may be grown in too great quantities. For instance, one nurseryman lists twenty-nine different kinds of philadelphus, when ten or a dozen of the best would be sufficient to represent this group satisfactorily. Lilacs are, of course, the old bugaboo when it comes to carrying a large number of varieties in stock. At the Arnold Arboretum we

have been able to select fifteen varieties as representing the best in a group of over 300. It would seem that there is ample opportunity for a reduction in the number of varieties carried, with special attention given to a better selection of the varieties to be kept in stock.

A few plants which should be grown more by northern nurserymen.

This list is not all inclusive by any means since it could be enlarged to five times this size with little effort. It does not contain many evergreens, simply because these were not greatly emphasized in the talk.

Acer platanoides erecta
Acer rubrum columnare
Acer saccharum monumentale
Acer saccharum pyramidale
Berberis Gilgiana
Berberis koreana
Carpinus Betulus pyramidalis
Ceanothus pallidus roseus
Cedrus Libani (hardy strain)
Evonymus alatus compactus
Forsythia ovata
Fothergilla major
Fothergilla monticola
Ginkgo biloba fastigiata
Hamamelis japonica
Hamamelis vernalis
Hydrangea petiolaris
Laburnum alpinum
Magnolia conspicua
Magnolia Kobus
Magnolia Soulangeana Alexandrina
Magnolia Soulangeana Lennei
Magnolia Soulangeana speciosa
Magnolia stellata
Malus baccata
Malus coronaria Charlottae
Malus robusta
Malus Sargentii
Malus Scheideckeri
Malus spectabilis
Malus spectabilis albi-plena
Malus spectabilis Riversii
Malus toringoides
Malus Zumi calocarpa
Philadelphus grandiflorus
Philadelphus Lemoinei Avalanche
Philadelphus maximus
Philadelphus splendens
Picea Omorika
Prunus Sargentii
Prunus subhirtella
Prunus yedoensis
Quercus imbricaria
Rhododendron Smirnovii
Stewartia koreana
Syringa pubescens
Thuja plicata (hardy strain)
Tripterygium Regelii
Ulmus americana ascendens
Ulmus foliacea stricta
Ulmus glabra fastigiata
Viburnum dilatatum xanthocarpum
Viburnum Sieboldii

Upright-growing trees are becoming more and more popular to replace the vigorous-growing *Populus nigra italica*. Such trees may not be so fast-growing, but they are not susceptible to the serious disfiguring canker that so troubles the Lombardy poplar after it has reached maturity. What is most important to nurserymen is the fact that the buying public is beginning to know this and demand other trees in its place.

Dense-growing forms of plants are always in demand. *Evonymus alatus compactus*, for instance, has only been in this country since about 1928, but it is becoming increasingly popular. It has all the characteristics of the common type except its habit of growth, which is round and densely branched. Last fall at the arboretum one of these plants created more interest than any other because of its brilliant red autumn color and its tendency to hold this color for about ten days, when most other plants dropped their brilliantly colored leaves after a day or two.

Shrubs with yellow fruits are always in demand and at present in the minority in most nurseries. The yellow-fruited form of the linden viburnum, *Viburnum dilatatum xanthocarpum*, is a rare plant of exceptional merit. It can be used with the red-fruited type to good advantage, but as a specimen is certainly outstanding when its yellow fruits are set off with the background of its red autumn-colored leaves. There are yellow-fruited forms of many common shrubs; some of them are better than others, but a few certainly go a long way in brightening the shrub border in the fall.

Nurserymen who do a business in the colder regions of this country are, of course, always interested in the new hardier forms. Everyone likes the golden-flowered forsythia, yet its flower buds are often killed in colder portions of New York. There is a forsythia which is proving perfectly hardy under such conditions, *Forsythia ovata*, the Korean forsythia. Introduced into this country in about 1917 by E. H. Wilson, it is proving to be the only forsythia

which blooms after the severest winters. This plant should be sold a great deal more than it is in the colder regions. It is not so well flowered as some of the other varieties and so should not replace them where they can be depended on.

Certain rust-resistant barberries are about to take the place of the common *Berberis vulgaris*. *Berberis Gilgiana* and *B. koreana* are both sufficiently resistant to the black stem rust of wheat to be in the list made up by the United States Department of Agriculture for shipment into the spring wheat area with a permit. Both are excellent plants, with long clusters of bright red fruits that are as good as, if not better than, those of *Berberis vulgaris* in many respects.

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OHIO SHORT COURSE.

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Native Plants of Garden Value

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ple rules are followed. First of all, seeds should be planted in a place and sufficiently far apart so the seedlings will not have to be moved during their first season of growth; otherwise, even with the greatest of care the young taproots will be broken, and a broken taproot on a seedling monkshood means death in most cases. But to get back to the clambering monkshood, this species, which is inclined to climb, with its height of four or five feet and its splendid blue flowers in crowded clusters during August and September, is an excellent plant for shrub borders where it can have the support of low shrubs.

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Amorphas.

Although the range of this page is confined to herbaceous plants, I should like to include one little shrub in these notes on native plants. Among the fifteen or more species of *amorpha*, all of which are native to North America, there are a number of definite garden value, though all cannot be mentioned here. One species, *A. microphylla*, because of its small stature which makes it suitable for rock garden use, should make money for any grower catering to that kind of trade. The plant in question, when seen at all in nurseries, is usually known as *A. nana*, but as there seems to be some confusion in the use of this name, it may be well to add a note along that line. According to the literature, *A. nana* is Nuttall's name for the *A. microphylla* of Pursh, but the latter name, being the older, is retained by most systematists. But variety *humilis* of *A. fruticosa* has been given the name *A. nana* by some horticulturists, making the true *A. microphylla* confused among gardeners. The latter, as I have had it, is a foot-high shrub, with quite glabrous leaves, which are made up of tiny leaflets, and with usually solitary spikes of purplish flowers. The other plant mentioned in this paragraph, *A. fruticosa humilis*, is also a good subject for the rock garden or for a front position in the border. Its height of eighteen inches is not too tall for the former position, and its tomentose leaves, especially while young, add a distinctive note to any planting. *Amorphas* are not hard to grow from seeds, and they may also be propagated from cuttings of green wood under glass or from hardwood cuttings in autumn inserted in a protected frame outdoors.

Amsonias.

Two native genera of the dogbane family, *amsonia* and *apocynum*, are of more value than their presence in gardens would indicate. The only native species of the first-named that I have found of any great value is a much-named plant usually known as *Amsonia Tabernaemontana*. It grows naturally in low ground from Pennsylvania to Missouri and southward, though it does quite well in dry situations and has been perfectly hardy

in northern Michigan. It will grow three feet high in good soil that is fairly moist, though perhaps two feet is a better figure for dry-soil plants. To me its greatest value is its beautiful, willow-like leaves, but its terminal panicles of small, light blue flowers in June are both pleasing and useful. It is equally good for the wild garden in either sun or part shade, and its flowers together with the accompanying foliage make an acceptable cutting item. It grows readily from seeds and may also be multiplied by means of cuttings after flowering is done.

None of the dogbanes seem to have impressed gardeners to any extent, at least not to a sufficient degree to prompt inclusion of a single one in their plantings. Our common eastern form, *Apocynum androsaemifolium*, is, however, an excellent plant for sun or even half shade, making a beautiful picture with its clusters of pink bells hanging above beautiful, pale green foliage. In addition to this one of the eastern states, the west holds some good kinds. Some years before the late Ben Johnson, of Salt Lake City, went on his final collecting trip into the Great Unknown, he sent me seeds of *A. pumilum*. It proved to be an excellent plant, with ample foliage, dark green above and pubescent beneath, and with flowers a deep rose-pink. There are probably others of equal or greater value, if we could only get them. They are easily increased from seeds.

HEDGES FOR SALINE LAND.

Irrigated land that has a high water table is likely to suffer from alkalinity. On such lands hedges and wind-

breaks are important. Of the shrubs and small trees suitable for this purpose the Russian olive is one of the species that can best endure the presence of a moderate quantity of salts. Golden willow also is worthy of a test in regions having severe winters. In the southwest, the pomegranate and species of tamarisk, decidedly salt-tolerant plants, are excellent for hedges. One species of tamarisk is hardy as far north as central western Nevada. Some larger-growing saltbushes are tolerant of salinity and also make sturdy hedges.

CODLING MOTH CONTROL.

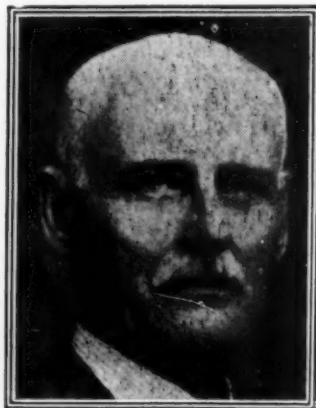
Zinc arsenate, on the basis of its performance during the last two seasons, one dry and one normal, appears to be a satisfactory substitute for lead arsenate in codling moth control. The control has been practically equal to that obtained with lead arsenate, and the lead residue was eliminated, although arsenic was not. Since lead is the more difficult material to remove, this development is of distinct promise.

L. J. WESELY.

Leading the Northern Retail Nurserymen's Association for a second term, L. J. Wesely devotes to trade organization work the same ability that he demonstrated in the capacity of mayor of his home town, Owatonna, Minn. That locality is famous for several prominent nursery firms, conspicuous among them the Owatonna Nursery Co., of which Mr. Wesely is president and manager. The company owns and operates 550 acres of land devoted to growing nursery stock.

Picturing him under the heading "Folks Worth Knowing," the Owatonna Journal Chronical recently included the following paragraph among its comments on the ex-mayor and active nurseryman:

"L. J. is a 'square shooter' and through his business and city official contacts has gained a wide recognition for that and his qualities of aggressive leadership. The latter has extended his acquaintance to a wide area of the northwest as his growing business has spread the name and fame of his home town to people and communities previously and regrettablely unaware of its existence."



L. J. Wesely.

New England Convention

Month of Trade Gatherings Closed by Well Attended Regional Meeting at Boston, Voting to Support Plan for Washington Representative

The annual convention of the New England Nurserymen's Association was held at the Hotel Statler, Boston, January 26 and 27, with the usual good attendance. An adjourned meeting of the Massachusetts Nurserymen's Association was held January 26 to discuss the suggested Washington representative. There was a marked divergence of views. Massachusetts is asked to contribute \$750. Finally the matter was referred to a committee consisting of Donald D. Wyman, Seth Kelsey and Cornelius van Tol to bring in a report with recommendations.

The New England convention was called to order by President William N. Craig at 2 p. m. with an excellent attendance. Vermont only being unrepresented. In his official address, Mr. Craig, after reviewing conditions in 1936 and the unseasonably open weather of the present winter, spoke optimistically of trade prospects. The need of some representative in Washington was apparent, he said, and if a man of integrity and ability could be found to watch legislation closely, it might be money well spent if it made unnecessary the frequent presence of members of the trade at hearings, often called at inconvenient seasons.

Nursery stock is badly depleted in many sizes and varieties, said Mr. Craig. Bills are being better paid, but in the trade itself there is still great room for improvement. Competition for numerous small concerns grows ever keener, but many of these are but poorly posted and will not survive long. There is still good opportunity for the man who knows his business and grows the kind of stock amateurs are looking for. Publicity fifty-two weeks in the year is necessary, and purely horticultural papers offer the best medium, rather than magazines which are nine-tenths house furnishings to one-tenth gardening.

Reports of the secretary and the treasurer were accepted. The president appointed these committees: Nominating, Alex Cumming, Jr.; J. J. McManmon, C. H. Groaton; auditing, Charles R. Fish, V. A. Vanicek, Cornelius van Tol; resolutions, Edward W. Breed, Seth Kelsey, Walton G. Wyman.

In the committee reports, Richard M. Wyman gave an interesting and thoughtful one for the educational committee. Donald D. Wyman followed with a full one on legislative matters. C. R. Fish spoke briefly for the vigilance committee.

Interesting Addresses.

E. L. D. Seymour, horticultural editor of *American Home*, took for his subject, "The Nurseryman in Perspective," and treated his subject thoughtfully.

Dr. E. D. Merrill, director of the Arnold Arboretum, discussed "Eastern Asia as a Source of Ornamental Plants." After speaking of the many plant collectors who had sent material home from China, he stated that there were immense areas there still unexplored, which would yield many novelties for future years. The arboretum since its establishment had been the means of introducing over 2,500 woody plants, of which 1,400 were entirely new. In the past two years the arboretum had received about 600 new varieties, not all of which might prove hardy, however.

January 27 the resolutions committee read resolutions on the deaths of John C. Chase, for many years an active member, and Dr. A. W. Gilbert, former commissioner of agriculture of Massachusetts.

Robert Pyle, West Grove, Pa., spoke on the recent meeting of nurserymen at Chicago. Through charts and diagrams he showed how the country was divided into regions and discussed at some length the question of a representative in Washington. R. M. Wyman, C. H. Groaton and others joined in the resulting discussion.

George Graves, nursery culture professor at the Waltham market garden field station, stated that while ornamental horticulture was classed as a luxury, it added much to human happiness. Hemlocks and yews were coming much into favor, and weeping trees, outside of Japanese cherries and Sargent's hemlock, were passing out of the picture with many varieties of arbor-vitæ and cypress.

FROM ALL OVER.

From every part of the country come subscription and advertising orders that testify to the appreciation of the service. The American Nurseryman is rendering the industry, through the information and help in its reading columns, and through the contact it makes for sellers in the advertising columns. Here are comments from different sections of the country:

"Your paper is the best we have read and has proved a great help to us in our business. Enclosed find check for subscription."—Eubank Bros. Nursery Co., Waxahachie, Tex., Jan. 20, 1937.

"We have sold all our seedlings through the advertisement in the American Nurseryman. Thanks!"—Mount Vernon Nursery, Mount Vernon, Wash., Dec. 11, 1936.

"Enclosed is renewal of your magazine. It is the best of its kind."—O. E. Dill, Carmi, Ill., Dec. 4, 1936.

"I cannot get along in my business without the American Nurseryman."—Meroney Nursery Co., Mocksville, N. C., Dec. 7, 1936.

"I find the American Nurseryman a most interesting and instructive paper and do not understand how anyone interested in nursery work, landscape design or garden construction can get along without it. Many articles that appear in the course of a year are alone worth more than the subscription price."—Charles Kenney, 1332 W. 90th St., Los Angeles, Calif., Jan. 2, 1937.

If you are not a subscriber, send a dollar bill for twenty-four issues of the ensuing year. If you have stock to move, send copy for an advertising offer and note the prompt returns you receive.

W. H. Judd, of the Arnold Arboretum, gave an interesting illustrated lecture on flowering trees and shrubs through the season.

Election of Officers.

The nominating committee brought in the following slate of officers: President, Joel Barnes, Yalesville, Conn.; vice-president, H. P. Kelsey, Jr., Salem, Mass.; secretary, Lester Needham, Springfield, Mass.; treasurer, F. S. Baker, Cheshire, Conn.; executive committee, W. N. Craig, Weymouth, Mass.; V. A. Vanicek, Newport, R. I.; Cornelius van Tol, Falmouth, Mass. These were elected by the casting of one ballot.

At the afternoon session Dr. Donald D. Wyman lectured on "Autumn Beauty in Trees and Shrubs," with over 100 colored slides. Ralph Fay, of Boston, spoke on "What Is the Trend in Home Planting and Home Planting?" and looked for greatly increased building this year.

Next came a lengthy discussion of the suggested Washington representative, in which many joined. It was finally voted to support it, after talks by Donald D. Wyman, by F. S. Baker, George Harris and others.

Donald D. Wyman was selected as representative to the meeting of the A. A. N. with George Harris as alternate.

WESTCHESTER ELECTION.

The annual meeting of the Westchester County Retail Nurserymen's Association took the form of a dinner at the Elks' Club, White Plains, N. Y., January 18, with an attendance of thirty-five.

Speakers included Joseph J. Lane, of House and Garden, who commented on the better demand and higher prices for nursery stock; Herman Merkel, superintendent of Westchester county parkways, who defended gifts from the county nursery to municipalities and school districts as justified because the taxpayers' money paid for the trees and they stimulated a further planting of buildings and highways; William D. Howard, of the state department of conservation, who told of the production of trees in the state nurseries for reforestation and the consequent demand from private individuals for stock, which he emphasized is distributed under regulations which permit sale of trees only when cut as timber; President Leslie Scott, who reported on the A. A. N. reorganization plan; H. A. Naldrett, president of the Long Island Nurserymen's Association; John J. Jennings, of the New Jersey Nurserymen's Association; Carroll Perkins, Newark, N. Y.; James Scott, Elmford; P. J. Van Melle, Poughkeepsie, and Michael Buckley, Westchester county farm bureau agent.

The following officers were elected: President, Howard C. Taylor, Tarrytown; vice-president, Fred Langle, Hawthorne; secretary, Richard Langle, Tarrytown; treasurer, E. J. Carlson, Bedford; executive committee, Axel C. Palm, Yorktown, and William Jackson, Rye.

Meetings of the association will be held on the fourth Tuesday of each month, and speakers will be secured for each meeting. Herbert H. Handleman acted as secretary pro tem. of the meeting.

New York Meetings

State Nurserymen's Association and Horticultural Society Hold Interesting Sessions at Rochester in Successive Weeks

NURSERYMEN AGAIN ACTIVE.

Renewed Interest Displayed.

The annual meeting of the New York State Nurserymen's Association held in Rochester, N. Y., January 20 was one of the most successful that this group has held in several years and marks a renewed interest in the industry and in cooperation among nurserymen in New York state.

W. J. Maloney, Dansville, opened the meeting with his presidential address, in which he congratulated the nursery industry on having survived the depression and declared all signs pointed to a good year ahead. He called for caution in planting to meet legitimate trade demands, and discouraged overplanting with the idea of making a killing. He reminded the association of the helpfulness of the experiment station at Geneva and of Cornell University at Ithaca in meeting problems of the industry, stating that in his opinion nurserymen are lax in accepting the opportunities laid directly at their front door. He also noted the many new fruits of national interest which had originated at the Geneva experiment station.

Five Divisions.

The members then split into five groups for sectional meetings as follows: (1) Retail sales, with L. J. Engleson, Newark, chairman; (2) catalogue houses, with William L. Glen, Dansville, chairman; (3) landscaping, with William Pitkin, Jr., Rochester, chairman; (4) roadside sales, with Howard W. Maloney, Dansville, chairman, and (5) production, with R. L. Holmes, Newark, chairman.

In the production section, Dr. F. L. Gambrell spoke on the control of the spruce gall aphid and other pests of evergreens in the nursery. He illustrated his talk with colored slides and showed some excellent control by timeliness of spraying with proper materials.

Dr. D. S. Welch, of Cornell University, then gave an interesting discussion of plant disease control in the nursery, pointing out that the practices commonly known as good nursery practices were the very ones that the plant pathologists would recommend in controlling diseases. He emphasized prevention rather than cure, but pointed out some of the methods of control when the disease became established in the nursery.

Rootstocks.

Dr. H. B. Tukey discussed the trends in fruit tree rootstocks, pointing out that the rootstock problem had emerged from an inconspicuous item to a matter approaching first rank in both orchard and fruit tree nursery circles. He emphasized that while in the past disease and insect troubles, pollination, pruning and orchard practices had been the subjects for immediate attention, now the rootstock problem is appearing. There are many methods of improving rootstocks, through selection of seeds, planting of seedling orchards, top-working and use

of vegetative rootstocks. Each of these was discussed with relation to the needs of the present-day orchardist and nurseryman.

A splendid luncheon was served in the Palm room of the Seneca hotel. After the luncheon, the afternoon was spent in discussing trends in the industry, as follows: "Fruit Varieties," presented by Prof. Richard Wellington and Prof. George L. Slate, of the Geneva experiment station; "Ornamental Planting," presented by Dr. Donald Wyman, of the Arnold Arboretum, Jamaica Plain, Mass., and "The Economics of the Nursery Industry," presented by Dr. George F. Warren, of Cornell University.

The program was well attended, with nearly 150 present. The talks were fine, the material was helpful and the general tone and interest of the nursery industry in New York state showed definite improvement.

The officers for the coming year are: President, W. J. Maloney, Dansville; vice-presidents, E. H. Costich, Westbury; Philip H. Farber, Rochester; Arthur N. Christy, Newark; D. B. Belden, Fredonia, and secretary - treasurer, Charles J. Maloy, Rochester.

HORTICULTURAL PROGRAM.

Discuss Production and Varieties.

The Rochester meeting of the New York State Horticultural Society, January 12 to 15, was largely a horticultural meeting; that is, the discussion was of problems of production and growth of plants, as contrasted with the marked interest in marketing, advertising, transportation and packages which was noticeable five or ten years ago.

The first day's session was devoted largely to insect and disease problems, beginning with a review of insect problems in 1936 led by Prof. C. R. Crosby, of Cornell University, and a review of plant diseases in 1936 led by A. B. Buchholz, of Albany. Professor Hartzell, of the experiment station, discussed tar oil, petroleum oil and other spray materials available in the control of rosy aphid, bud moth and scale insects. He pointed out that there were fourteen mixtures available with which the grower should be familiar, each one of which would fit a particular need in the early season control of these insects.

Dr. J. M. Hamilton, of the Geneva station, reported on the experimental work with fungicides which he has been carrying on in western New York. He emphasized the well known fact that lime-sulphur should be depended upon where scab is already present so that it is necessary to burn out the lesions, but that the wettable sulphurs are desirable and satisfactory if they can be put on before rain and before infection has taken place. He emphasized the human factor in spraying, suggesting that timeliness and thoroughness and the selection of the proper materials are the biggest factors. He sug-

gested certain secondary control measures, such as well pruned, vigorous trees and good machinery.

Peach Varieties.

The discussion then turned to peaches. Prof. M. A. Blake, of New Jersey, spoke on some fundamentals in modern peach production. He reviewed the history of the peach industry and the changes in varieties, and intimated that the peach industry was again in a period of turnover. He suggested that it was useless to attempt to substitute a similar product to meet a given competition, and that it was far better for a region to grow varieties which it could grow well there, rather than to attempt to grow an inferior product of a variety grown in some other section. He observed that western New York grew Rhode Island Greening to perfection, while it was not so successful with some varieties now grown in the Pacific northwest. It seemed to him better for western New York to stick to the varieties that it could grow best and leave the other varieties to other sections. The market demands for a peach are good size—2½ inches or over; attractive red coloring, firm texture, freestone, flesh which is slow in softening, quality better than Elberta, short pubescence, uniform size and coloring, and preferably yellow flesh. He emphasized that the market demands for a peach were not so much that the flesh be overly firm as that it not soften too rapidly. The California-type peaches, which are firm, are generally unsatisfactory in the east because they soften rapidly. He reported that New Jersey growers are cutting out Elberta and planting Golden Jubilee, Cumberland and Pioneer.

Short talks were made by growers on the subject of peach thinning. Some felt that thinning was essential to profitable peach production, while others felt that they have derived little benefit from thinning. The consensus was that there was need for investigational work in western New York on peach thinning and it was suggested that the preliminary work that has been done by the Geneva station be expanded and continued.

Varieties for Roadside Trade.

Wednesday was devoted to a joint session for nurserymen and fruit growers. In the forenoon a fruit variety clinic was held, with Dr. H. B. Tukey, of the Geneva station, as chairman. Prof. Richard Wellington, of the Geneva station, discussed new and noteworthy fruits. He was followed by George A. Morse, of Williamson, who mentioned the succession of varieties for the roadside stand and local trade. His market began, he said, with the Seneca sweet cherry, which was followed by strawberries, and these in turn by sweet cherries. Raspberries then received attention, including the new varieties, Newburgh, Viking, Taylor and Marcy. A good succession of apples for the roadside trade, he stated, consisted of Red Astrachan, Yellow Transparent, Melba, Early McIntosh, Duchess, Sweet Bough, Milton, Gravenstein, McIntosh, Sweet Delicious and Golden Delicious. Among peaches, he suggested Mikado, Marigold, South Haven and Elberta. He particularly recommended the Pacific plum and the

Erie, Seneca, Portland and Fredonia grapes.

Grant Hitchings spoke of commercial varieties of the present and said that he had grown 110 varieties during his fifty years as an orchardist. He made the point that the larger the business, the fewer the number of varieties. His suggestion of commercial varieties was Early McIntosh, Duchess, Wealthy, McIntosh, Cortland, Northern Spy and Rome Beauty. He pointed out that it was not profitable to attempt to grow fancy or extra-fancy varieties in his section, but that he attempted to put up a good No. 1 pack.

E. Stuart Hubbard, of Arlington, then spoke on commercial varieties of the future. His opinion was that a section should choose a variety that cannot be grown elsewhere; should grow a quality apple for a particular purpose, such as baking, pie making or dessert; should grow an apple which is durable and which has little waste, and select a variety which has been shown to have definite therapeutic qualities, such as high vitamin C content.

Prof. M. A. Blake spoke on some of the newer varieties of peaches, calling attention to the general tenderness of Elberta, J. H. Hale and seedlings of J. H. Hale. He suggested Hale Haven as one of the better new varieties and likely to replace South Haven.

Prof. G. L. Slate, of the Geneva station, and J. M. Kujawa, of Webster, discussed small fruits, mentioning as highly desirable the Taylor, Marcy and Indian Summer red raspberries, the Sodus purple raspberry, the Bristol and Naples black raspberries and the Red Lake currant.

Prof. F. E. Gladwin, of Fredonia, suggested a trend away from Concord in the commercial industry. He called particular attention to Fredonia, a new grape, which ripens three weeks ahead of Concord. Westfield, Ontario, Van Buren and Golden Muscat were also considered promising.

The afternoon program presented Dr. J. K. Shaw, of Massachusetts, who spoke on leaf identification in the nursery and the securing of good nursery stock true to name by patronizing nurseries which dealt in certified and inspected stock.

Dr. P. W. Zimmerman, of the Boyce Thompson Institute, gave a most interesting presentation of hormones and growth-promoting substances used in the rooting and growth of plants. He showed lantern slides and motion pictures of plant growth, which portrayed vividly the responses of plants to dilute concentrations of certain chemicals. The afternoon session closed with an interesting discussion of landscaping by Prof. J. C. Porter, of Cornell University.

The Thursday session was devoted to growing and harvesting fruit. Dr. J. R. Magness spoke on soil moisture and fruit growing. He was followed by a discussion of irrigation by F. W. Cornwall, Jr., of Pulteneyville; Dr. A. B. Burrell, of Cornell University, and L. D. Dean, of Geneva, O.

Essential Fertilizer Elements.

In the afternoon Prof. R. C. Collison, of the Geneva station, spoke on fertilizers, mentioning particularly the minor elements which have been causing so much concern in fertilizer circles the past few years. He emphasized that while there were thirty minor elements

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which had been found essential at one time or another, there were only six or eight of any consequence, and that of these only boron, zinc, aluminum and possibly magnesium were of any concern to the fruit grower. So far as New York state is concerned, he suggested that there was as yet no indication of any deficiency of minor elements.

Dr. A. J. Heinicke, of Cornell University, spoke on photosynthesis and presented figures of the leaf activities of apple leaves inclosed in glass cages. Dr. J. R. Magness, of Washington, D. C., discussed harvesting and handling of fruit. He pointed out that too early picking means scald and poor quality, whereas too late picking means softening, dropping and premature breakdown of the fruit. He said that fruit color is one of the best tests of fruit ripening. It was suggested that there was a tendency throughout the

country toward spot picking and paying more attention to proper picking dates.

The Friday session was devoted to marketing and advertising. L. D. Dean, of Geneva, O., brought interesting comments regarding successful marketing methods in Ohio. E. Stuart Hubbard, of Arlington, spoke on the New York and New England Apple Institute, and Donald Wickam discussed the agricultural program as it affects the fruit grower.

All in all, the meeting was the best the society has held in several years—as measured by large attendance, general interest and discussion. The new officers are: President, Halloran H. Brown, Monsey; vice-presidents, George A. Morse, Williamson; James Roe Stevenson, Cayuga; Wessel Ten Broeck, Jr., Hudson; and Percy Morgan, Lewiston; secretary-treasurer, Roy P. McPherson, Leroy.

Massachusetts Convention

*Instructive Addresses by Prominent Speakers
Feature Well Attended Meeting at Boston*

The annual meeting of the Massachusetts Nurserymen's Association was held at the Hotel Statler, Boston, January 12, with an excellent attendance. The reports of the secretary-treasurer were read and accepted.

President W. N. Craig, Weymouth, in his address spoke of the improvement in trade, which was pronounced in the fall. He referred to the necessity of the nursery industry's having a representative in Washington to guard its interests and render needless the frequent visits of prominent members of the trade to hearings in that city at a heavy sacrifice of time and money. He declared that the huge sums members of the trade were said to have realized from highway plantings had been greatly exaggerated. In Massachusetts, he said, many highway plantings are in extremely poor taste, with cheap, commonplace material. What nurserymen need more than anything else is an increased building of new homes, Mr. Craig continued. Such work is progressing on a pitifully small scale here as compared with European countries. Signs are not wanting, however, that much of this long-deferred building will get under way this year. The speaker then advised members of the trade to pay bills promptly, keep their establishments neat, season their lists with more new offerings, use more publicity, especially in horticultural papers; stick to catalogue prices, and visit and support the market garden field station in Waltham.

The president appointed Charles R. Fish, Louis A. Reardon and Julius Heurlin a nominating committee; Paul Bauman and Seth Kelsey, an auditing committee, and Edward W. Breed, a committee of one on resolutions. R. H. Allen, director of plant pest control for Massachusetts, made a short address, reporting that the Japanese beetle is rapidly extending its range.

Prof. George Graves, of the nursery division of the Massachusetts State College at the Waltham field station, made a thoughtful address, outlining a number of ways in which the industry might improve itself. John V. McManmon, director of roadside improvement for Massachusetts, showed several films depicting the effects of the disastrous floods in the state in March, 1936, and spoke on flood-control measures that had been taken, as well as on highway construction and plantings.

Donald D. Wyman, of Bay State Nurseries, Inc., North Abington, spoke of the meeting of the Eastern Association of Nurserymen and of the urgent necessity of the trade's having a well paid representative in Washington to watch all legislation, care for the interests of the trade and go to the constant hearings which nurserymen are expected to attend. He mentioned the sums allotted to the New England states, and after some discussion it was voted to hold an adjourned meeting January 26, just in advance of the meeting of the New England Nurserymen's Association, before final action.

After lunch, which was attended by forty members, the nominating com-

mittee brought in the following list of officers for the ensuing year: William N. Craig, president (fourth term); John V. McManmon, vice-president; W. H. Thurlow, secretary and treasurer, the officers and Herbert C. Barrows, James Feronetti, Thomas J. Godwin and Peter Mezitt, executive committee, and Harlan P. Kelsey, Louis A. Reardon and Donald D. Wyman, legislative committee. Edward W. Breed read resolutions on the death of Dr. Arthur W. Gilbert, former commissioner of agriculture for Massachusetts and an honorary member of the association, which were adopted by a rising vote. The auditing committee found the treasurer's books correct.

Dr. Donald D. Wyman, horticulturist at the Arnold Arboretum, Jamaica Plain, gave an excellent illustrated lecture, with colored slides, mainly of well known plants, starting back about 200 years and naming the introducers and collectors of many plants in commerce today. The plants were shown in flower, fruit and autumn foliage and the range covered the whole field of hardy woody plants.

William H. Judd, propagator at the Arnold Arboretum, described a second European trip made last summer, commencing in mid-August, which covered visits to France, where the gardens at Versailles, the Jardin des Plantes, Villmorin's and the numerous nurseries in the Orleans section were visited. Bodnant Hall and other noted establishments in North Wales, with their great wealth of magnificent conifers; gardens in the semitropical west part of England, Hillier's, Waterer's and other noted nurseries and many large private estates, as well as the Kew and other flower shows, were seen. A visit to Ireland, which included the finely kept botanical gardens at Glasnevin and the gardens of the Marquis of Headfort, Sir Frederick Moore and others showed how wonderfully rhododendrons, conifers and many trees and shrubs classed as of doubtful hardiness thrived.

AMERICAN NURSERYMAN

ELECT AT HARTFORD, CONN.

At the annual election and meeting of the Connecticut Nurserymen's Association, held at Hartford, Conn., January 20, Walter O. Filley, forester at the Connecticut experiment station, advocated the appropriation by the legislature of more money for the maintenance and development of state parks of Connecticut. A committee appointed to cooperate with the Connecticut State College in founding an arboretum at the institution was named as follows: Edgar M. Brown, Simsbury; Joel Barnes, Wallingford; Charles S. Burr, Manchester; Frank Goodwin, Bloomfield, and Arthur Webster, Cromwell.

A resolution was adopted supporting the agricultural program of the Connecticut State College. Another resolution adopted opposed all state and federal nurseries, which were described as unfair competition by one member.

The election of officers resulted as follows: President, Edgar M. Brown; vice-president, Louis Vanderbrook, Manchester, and secretary-treasurer, Peter J. Cascio, West Hartford.

Charles S. Burr was elected a delegate to the national convention of nurserymen to be held next July in Chicago. Fred S. Baker, Cheshire, was named delegate to the Council of Eastern Nurserymen, with Joel Barnes, alternate.

New members admitted were: Charles Elton, Bristol; John Sonstroem, Bristol; Edward Mesheski, Bristol, and the Woodmont Nurseries, Woodmont.

Lester W. Needham, of the Adams Nursery Co., Springfield, Mass., gave detailed and valuable pointers on "Merchandising Nursery Stock."

There was considerable discussion about the burden of taxes the nurseryman is having to carry. The association was strongly in favor of backing up the American Association in its endeavors to have a contact man in Washington to look after the nurserymen's interests.

SEEK LAW CHANGES IN IDAHO.

The Idaho State Nurserymen's Association held a joint meeting with florists of the state at the Idanha hotel, Boise, January 19, and discussed the social security act as it affects nurserymen and florists. They also decided to

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Chinese Elm, 2 to 4-in.
American Linden, 1 1/2 to 3-in.
Silver Maple, 1 1/2 to 3-in.
Box Elder, 1 1/2 to 3-in.
Catalpa Speciosa, 2 to 4-in.
Norway Poplar, 2 to 4-in.

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Alpine Currant
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HARDY PERENNIAL PHLOX

30 varieties. Priced right

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New Hybrid Lilacs, Evergreens and
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The Cottage Gardens
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seek a small change in the horticultural law to eliminate class B licenses, making all licenses \$15 per year, thus putting everyone on the same basis. However, those who do less than \$200 in business during the year may secure a \$10 credit the following year. The trade will also seek to have the bond eliminated for all nurserymen and florists who do not handle fruit stocks.

The outlook for the future is bright in Idaho, but stock of all kinds seems to be short, particularly smaller items. One can secure all the large-size stock he wishes to plant. E. O. Nord, See'y.

OHIO ANNUAL MEETING.

Election of Officers.

Officers elected at the annual business meeting of the Ohio State Nurserymen's Association, held January 18 and 19 at the Deshler-Wallick hotel, Columbus, O., were as follows: President, W. A. Natorp, of the W. A. Natorp Co., Cincinnati; vice-president, D. Barrett Cole, of the Cole Nursery Co., Painesville, and secretary-treasurer, W. G. Siebenthaler, of the Siebenthaler Co., Dayton.

Newly elected for two years on the executive committee were Thomas Kyle, of the Bohlender Nurseries Co., Tippecanoe City, and C. O. Allen, of the Allendale Nurseries, Delaware. Serving one year more on this committee are E. O. Carr, of M. L. Carr's Sons, Yellow Springs; Harry S. Day, of the Fremont Nursery, Fremont, and James Harrison, of the Storrs & Harrison Co., Painesville.

President A. N. Champion disposed of business at the opening session, when the report of W. G. Siebenthaler, secretary-treasurer, showed the association in good shape. Dues for 1937 were fixed on the basis of acreage as given in the 1936 report of the state division of plant industry.

Control of the Japanese beetle was discussed by C. W. Stockwell, of the United States bureau of entomology and plant quarantine, whose remarks were supplemented by E. H. Hanefeld, Ohio director of agriculture.

Edward Gibson, local attorney and tax expert, summarized legislation affecting nurserymen. Workmen's compensation was discussed at the second day's session by J. W. Beall, of the Ohio industrial commission.

Support New A. A. N. Plan.

Clarence O. Siebenthaler, A. A. N. president, told about the reorganization plan detailed in the last issue of the American Nurseryman. B. J. Greening, Monroe, Mich., spoke on the government problems which require a Washington representative.

Dr. L. C. Chadwick talked optimistically on "Signs of Improvement in Ohio Nurseries." Dr. Richard P. White, of the New Jersey agricultural experiment station, discussed "Shade Trees Adaptable for Street and Highway Plantings." Dr. J. S. Houser concluded with a summary of borer control experiments in Ohio.

D. Barrett Cole, who by the way was the capable toastmaster at the banquet, moved that the association go on record in favor of the proposed A. A. N. reorganization plan, which was adopted. The invitation of Herman Brummé to hold the summer meeting of the Ohio association at Cincinnati was accepted.

APPLE TREES

2 to 4-ft. Whips, 2-year Roots

300 Anoka
 300 Duchess
 250 Early Harvest
 350 Yellow Transparent
 450 Fameuse
 200 Wealthy
 50 Winter Banana
 100 Grimes Golden
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 250 Delicious, common
 600 All Red Delicious
 50 Black Ben Davis
 100 Common Winesap
 200 York Imperial
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 40 McIntosh, red
 150 Northern Spy
 40 Red Duchess
 250 Sharon
 650 Turley
 50 Red Astrachan

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 4,000 18 to 24 ins. 8.00 per 1000
 3,000 12 to 18 ins. 6.00 per 1000
 2,000 6 to 12 ins. 4.00 per 1000

AMERICAN ELM

4,000 2 to 3 ft. \$8.00 per 1000
 5,000 18 to 24 ins. 6.00 per 1000
 6,000 12 to 18 ins. 4.00 per 1000
 10,000 6 to 12 ins. 2.50 per 1000

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NORTH CAROLINA ASSOCIATION.

Holds Round-table Meeting.

The midwinter meeting of the North Carolina Association of Nurserymen was held at the Hotel Charlotte, Charlotte, N. C., January 19. About fifty nurserymen attended the morning and afternoon sessions, which were of round-table discussion and without a formal program. L. R. Casey, of Goldsboro, N. C., president, guided the discussion.

J. N. Howard, a state college of agriculture senior, demonstrated the forcing of root development of ilex cuttings following their soaking in indoleacetic acid. It was shown that root development is not only more rapid, but more extensive as well, when the stems are soaked in this acid prior to their being placed in a half-and-half sand peat mixture in beds subheated by electricity. Less damping-off was also shown by comparison of acid-treated cuttings with nontreated checks. Less successful efforts with the use of commercially prepared root-development hasteners on a wide variety of coniferous and broad-leaved cuttings were reported by S. R. Howell, of the Howell Nurseries, Knoxville, Tenn.

A motion was adopted that such available information on this method of rooting as was in the possession of the department of horticulture at the state college be sent to the members of the association by the department.

The association approved the solicitation of funds among nurserymen of the state for the support of a legislative representative of the A. A. N. at Washington, D. C. A motion was adopted that W. C. Daniels, S. D. Tankard, Jr., and President L. R. Casey compose a committee to solicit from nurserymen the state's quota of \$300.

Walter Campbell led the discussion on the gratis donation of nursery stock to public institutions. It was pointed out that such gifts are often neglected and the practice was generally condoned.

At the afternoon meeting, the association listened to a report of the executive committee, which had met the night previous. The committee recommended that W. C. Daniels serve as acting secretary until the election of officers at the annual meeting in July.

A paper prepared by Miss E. B. Drake, of the Drake Nursery, Winchester, Tenn., was read by the secretary. Miss Drake pointed out that fair price and fair play should be the keynote of the nurseryman. She advised nursery-

men to study the ebb and flow of the nursery business and to grow quantities of stock during a depression period so that it would be available when business returned to normal. She placed emphasis on the fruit tree stock shortage of a year ago. She decried the sale of stock to nursery peddlers who were unfamiliar with varieties and stock characteristics and proper names. She hoped for a time when the origin of bud supply and the segregation of varieties in the row and at digging time would be under the supervision of accredited officials.

W. T. Hanner remarked that the country is now able to pay a reasonable price for nursery stock. His remarks were discussed by M. E. Throneburg, S. R. Howell, Walter Campbell and S. D. Tankard, Jr.

A fair price committee, which had been functioning for two years, was discharged at its request. Another committee was appointed to continue with the work, upon motion passed by the association.

Visitors to the meeting included Charles H. Flory, of the soil conservation service, at High Point; C. H. Brannon, newly appointed state entomologist; Prof. M. E. Gardner, H. R. Niswonger and D. S. Weaver, of the department of horticulture at the state college, and R. N. Titus, resettlement administration, Hoffman, N. C. Another prominent visitor was S. R. Howell, of the Howell Nurseries, Knoxville, Tenn.

Dr. Leiby Resigns.

The report of the resolutions committee was read after preliminary remarks made by its chairman, Harry L. Nettles, who acted with D. S. Copeland and W. C. Daniels. He called attention to the resignation of Dr. R. W. Leiby, formerly state entomologist, as secretary-treasurer of the association. The resolutions committee report, adopted by a standing vote, acknowledged the efforts of Dr. Leiby in organizing the association four years ago, and in serving as secretary for three years, recommending that Dr. Leiby be elected to honorary life membership. That was done and he was also presented a purse of money.

Dr. Leiby expressed his pleasure in working with the nurserymen of the state and his thanks for being elected to honorary life membership in the association. He had resided in the state for twenty-one years and had served as state entomologist for eleven years, but was not reappointed by the new com-

missioner of agriculture taking office last month. Dr. Leiby is secretary of the national plant board.

C. H. Brannon, the present state entomologist, was on motion extended hearty cooperation by the association.

OKLAHOMA ANNUAL MEETING.

Program on Varied Topics.

The Oklahoma State Nurserymen's Association met January 14 at the Huckins hotel, Oklahoma City, in its sixteenth midwinter meeting.

The meeting was called to order by the president, J. E. Conard. Theo. M. Green, of the Oklahoma City chamber of commerce, extended a welcome to the city. His subject was "Outlook for Business in 1937." He said that business is now at the highest level since the depression. There is little or no unemployment among skilled laborers. The farmer's purchasing power today is the highest in thirteen years.

In the president's address, Mr. Conard said that the nursery law which had been prepared for presentation to the legislature represented much hard work and thought, and that he considered it as fair and just as any law that could be proposed.

J. Frank Sneed discussed up-to-date methods of merchandising. He said that changing times required different methods of selling. He paid homage to the pioneers in the business who went from house to house and caused the southwest to become tree-minded. He stressed the necessity of giving good stock and good service, charging a living price and being a good enough collector to get the money.

J. T. Foote reported on the Dallas meeting of the American Association of Nurserymen.

Francis K. McGinnis, landscape specialist of the extension division of the A. & M. College, Stillwater, assured the nurserymen of his desire to cooperate with them in beautifying farm homes.

Prof. G. F. Gray, of the horticulture department of the A. & M. College, expressed his desire to be helpful to the nurserymen in any way he could.

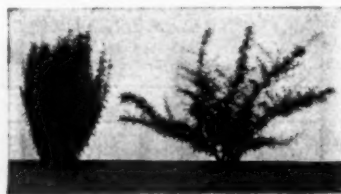
The president called upon T. A. Milstead for an impromptu speech. He said that much friction could be avoided if everyone adhered to the principles of the golden rule.

V. E. Bryan opened the afternoon program with a talk on "Spring Out-

Truehedge Columnberry

Berberis Thunbergii Pluriflora Erecta

U.S. Patent No. 119 Propagation Rights Reserved



New Truehedge Columnberry

Common Barberry

Compare these 2-year-old plants

The Plant Sensation of the Decade

The value of this wonder spire plant has been proven beyond a shadow of a doubt by the general acceptance of the trade. Over 500,000 plants being sold since introduction in the fall of 1934.

A rather limited supply is available for spring 1937. The established prices are as follows:

SIZE		WHOLESALE				RETAIL			
		Per 10	Per 100	Per 1000	Each	Per 5	Per 25	Per 100	
9	to 12 inches.....	\$1.40	\$11.00	\$95.00	\$0.30	\$1.15	\$4.50	\$16.50	
12	to 15 inches.....	1.75	14.00	125.00	.35	1.40	5.75	21.00	
15	to 18 inches.....	2.20	18.00	160.00	.45	1.75	7.50	27.00	
1 1/2	to 2 feet.....	2.80	24.00	210.00	.60	2.25	9.75	36.00	
2	to 2 1/2 feet.....	3.75	32.50		.75	3.00	13.75	50.00	

The large complete book depicting the "Ready-Made" hedge is available upon request. Purchases may be made direct from the Cole Nursery Co. or from the following licensed distributors:

Adams Nursery, Inc., Springfield, Mass.
Bay State Nursery, North Abington and Framingham, Mass.
C. R. Burr & Co., Manchester, Conn.
Henry A. Dreer, Inc., Philadelphia, Pa.
Fairview Evergreen Nursery, Fairview, Pa.
I. E. Ilgenfritz' Sons Co., Monroe, Mich.
Jackson & Perkins Co., Newark, N. Y.
Lester C. Lovett, Little Silver, N. J.

Mount Arbor Nurseries, Shenandoah, Ia.
Princeton Nurseries, Princeton, N. J.
E. D. Smith & Sons Co., Winona, Ont., Can.
Stark Bros. Nurseries & Orchards Co., Louisiana, Mo.
Shenandoah Nurseries, Shenandoah, Ia.
Storrs & Harrison Co., Painesville, O.
Wayside Gardens Co., Mentor, O.

WRITE for wholesale catalogue

The COLE NURSERY Company (Est. 1881) Painesville, Ohio

"Everything That's Good and Hardy"

POLYANTHA ROSEBUSHES

In heavy grades, budded on Multiflora roots. All 2 years old. Book now for delivery when wanted. Supply limited.

Cecile Brunner Eblouissant
George Elger Gloria Mundi
Golden Salmon Ideal
Katharina Zelmet Miss Edith Cavell

Prices based in lots of 10 of grade and variety

No. 1	No. 1 1/2	No. 2
\$1.30	90c	60c

Lots of 100 or more, deduct 5 per cent. No charge for packing. Usual nursery warranty. Cash with order, less 2 per cent, please.

ROSE HILL FARM

Dept. A.N.

Box 927

Tyler, Texas

Oregon-grown ROSEBUSHES

Send
for
List

PETERSON & DERING, Inc.

Wholesale Rose Growers
SCAPOOSE, OREGON

Burr's Quality Forcing Roses

Heavy branched, well rooted, excellent quality. Large list of varieties.

\$3.00 per 10, \$25.00 per 100

C. R. BURR & CO., INC.

Dept. A

Manchester, Conn.

ROSES

Hardy, two year, field-grown budded stock. Finest stock ever grown.

Write for List.

Lang Rose Nurseries

Box 702-A,

Tyler, Texas

HARDY AZALEAS

Kaempferi, Poulkanensis, Schlippenbachii, Mucronulata, Vaseyi, Enkianthus Camp., Juniperus Rigida, Taxodium Dist., White Spruce, Norway Spruce, Austrian, Limber Pine, Specimen Yews, 12 to 15-foot spread.

Send Want List

BRIMFIELD GARDENS NURSERY

245 Brimfield St., WETHERFIELD, CONN.

GRAPEVINES

800,000 of the finest grapevines we ever grew await your order. All the leading varieties in 1 and 2-year size. Get our price list before placing order.

E. W. TOWNSEND & SONS NURSERIES

Sallisbury, Maryland

look for Landscape Planting." He mentioned the number of new homes, the improved business conditions and neglect during the depression to make plantings that were needed.

The outlook for fruit tree plantings was discussed by Leo Conard. He said that tenant farmers are disinclined to establish orchards. The effort of the federal government to place tenant farmers on land of their own should stimulate planting. There is greater interest among professional and salaried persons in owning land and planting fruit trees, and they are looking for reputable nurserymen to advise them and furnish them with trees of good stock.

Illness prevented Dr. Bennett, president of the A. & M. College, from being present. Professor Cross, head of the horticulture department, addressed us in his stead. He said that nurserymen have been discouraged over Oklahoma's difficulties in fruit growing only because they were familiar with them. No section is without its troubles. He said that new orchards are being planted in well selected places and that much study is being given to varieties.

Jim Parker reported on important legislative matters confronting nurserymen. He said we could further our interests by keeping closer to the national organization and suggested that membership in the A. A. N. would be for our protection and would also enable us to bear our part of the needed expenses. A motion was made by J. F. Semtner that the association take membership in the A. A. N. This motion carried and the secretary was instructed to send the fee.

Mr. Lench, state forester, gave a short talk on his work.

The following officers were unanimously elected: President, V. E. Bryan, Capital Garden Nursery, Oklahoma City; vice-president, C. S. Stephens, Stephens Landscape Nursery, Tulsa; secretary-treasurer, J. A. Maddox, Oklahoma City.

The summer meeting will be held at Norman, Okla. Mrs. Jim Parker, Sec'y.

LECTURES AT ST. PAUL.

At the University Farm, St. Paul, Minn., last month, a series of talks was given revolving around a theme of the response of plants to cold. Franc P. Daniels, Long Lake, discussed winter injury to small fruit.

John Andrews, Faribault, devoted his remarks to a comparison of roots for fruit trees and the results which might be expected from the use of foreign or domestic rootstocks. Mr. Andrews pointed out that winter hardiness is such an important factor in Minnesota and other northern states that it is essential for stocks for grafting to have a reputation for hardiness. Of the French crab stock, nearly fifty per cent died in what was described as a test winter, thus making it necessary to use a stock much more dependable in order to withstand the rigors of a Minnesota winter.

L. B. Bassett, St. Paul, an amateur grower, gave an interesting talk on his experiences with what is now known as the plum-cherry.

J. D. Winter, secretary of the Minnesota Fruit Growers' Association, gave two talks, one on "New Developments in Handling Berries for Market" and one, "Irrigation—Cost of Installation and Maintenance."



ROSE NOVELTIES

ASK FOR NEW ROSE BROADSIDE

in four colors

showing

1936 NOVELTIES

and announcing

NEW LIBERAL GUARANTEE PLAN

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Nationally Advertised Varieties

JACKSON & PERKINS CO.
Newark, New York State

New Rose TEXAS CENTENNIAL (Red Hoover)

Plant Patent No. 102

Ask for color illustration and prices.

Also for our general list of roses.

DIXIE ROSE NURSERY
Tyler, Texas

Princeton Nurseries of PRINCETON, N. J.

SUPERIOR Hardy Ornamentals

LINING-OUT STOCK

Connecticut Valley Grown

Seedlings - Rooted Cuttings
Evergreen and Deciduous

Write for List

C. E. WILSON & CO., INC.
Manchester, Connecticut

Canterbury Boxwood

Buxus suffruticosa and B. sempervirens.

Selected uniform plants; bushy and foliated to center; masses of fibrous roots. Finished specimens from 4 inches up, ready for quick shipment. Prices lower, plants larger. Ask for special list. CANTERBURY, Box A, Easton, Md.

Coming Events

NEW JERSEY INVITATION.

Col. E. A. Phillips, president of the New Jersey Association of Nurserymen, has sent the following letter to members of associations in neighboring states, and Secretary L. C. Schubert adds that every nurseryman is free to attend and a large gathering is anticipated:

"The New Jersey Nurserymen's Association is holding its annual meeting at the Hotel Hildebrecht, Trenton, February 4 and 5, following the meeting February 3 of the Eastern Nurserymen's Association at the same place.

"We have arranged a program which should be of interest to every nurseryman in the east, and we hereby extend to you a cordial invitation to meet with us. Unemployment insurance legislation as it affects the nurseryman and reorganization of nursery associations are two matters which will be given full and free discussion.

"We believe you will find the discussions on these matters important to you and your business. May we welcome you to our meetings?"

The program, just announced, is as follows:

FEBRUARY 4, 10 A. M.

Call to order.
Roll call.
Reading of minutes.
Committee reports.

FEBRUARY 4, 2 P. M.

Address, "Social Security in New Jersey," by James G. Robinson, executive director of state unemployment compensation administration.
Report on reorganization of American Association of Nurserymen, by Frank Schmidt, Milburn, N. J. Questions and discussion, followed by appointment of committee to present recommendations for action to the members of the association the next day.

FEBRUARY 4, 7 P. M.

Banquet. Address by Governor Harold H. Hoffman. Entertainment by Surf Club revue. Midnight show by Howe's Hilarious Hill Billies.

FEBRUARY 5, 9:30 A. M.

Address, by Hon. William B. Duryee, secretary, New Jersey department of agriculture.
Address, by Dr. William Martin, director of research, New Jersey experiment station.
Report of progress for the year on plant pest problems, by Edgar G. Rex, supervisor plant pest control.
Illustrated lecture, "Unusual Plant Material," by Ben Blackburn, extension ornamental horticulturist.

FEBRUARY 5, 2 P. M.

"Giving and Getting Association Benefits," by Dr. Francis H. Greene.
"Cost Survey Up-to-date," by R. M. Bettis, New Jersey department of agriculture.
"Distribution of Insect Control Information," by Dr. Clyde Hamilton.
Report of reorganization committee appointed preceding day.
Nomination and election of officers.

ANNUAL WISCONSIN MEETING.

The Wisconsin Nurserymen's Association will hold its annual convention at the Republican hotel, Milwaukee, Wis., Thursday, February 11. The morning session will be called to order at 10 a. m. in Colonial hall. As this will be a business session of the association, the meeting will be open to members only.

At 12 o'clock noon, a dinner will be served to the nurserymen in the Guild hall, and informal discussions of the nurserymen's problems will be heard. Allied tradesmen and the public are invited to attend this dinner, reservations for which should be made with the secretary, M. C. Hepler, Pardecville, Wis., at the earliest possible date.

The afternoon session, open to the public, will begin at 1:30 p. m. sharp

and will be held in Colonial hall, with the following program: "Evergreens," by L. L. Kumlén, of the D. Hill Nursery Co., Dundee, Ill.; "Our Wisconsin Arboretum," by Professor Longenecker, of the University of Wisconsin; "A Trip Through Wisconsin's Commercial Orchards," in motion pictures, by H. J. Rahmow, secretary of the Wisconsin Horticultural Society, and "New Phases of Nursery Inspection," by E. L. Chambers, state entomologist.

Informal discussions will be allowed, and it is hoped that each nurseryman will come prepared to lead a discussion of any problems pertaining to the industry.

M. C. Hepler.

ON THE CALENDAR.

February 3, Eastern Nurserymen's Association, annual meeting, Hotel Hildebrecht, Trenton, N. J.

February 4 and 5, New Jersey Association of Nurserymen, Hotel Hildebrecht, Trenton.

February 9 and 10, Pennsylvania Nurserymen's Association, annual meeting, Hotel Stevens, Lancaster.

February 11, Wisconsin Nurserymen's Association, annual convention, Republican hotel, Milwaukee.

CINCINNATI ACTIVITIES.

The Greater Cincinnati Nurserymen's Association will conduct a nursery school February 23 and 24 at the Hotel Alma, Cincinnati, O., with sessions in morning, afternoon and evening, a banquet occurring on the first evening. The registration fee is \$1, and L. C. Chadwick and Alex Laurie will be present from Ohio State University to conduct the program.

The Greater Cincinnati flower and garden show organization will meet February 6 to discuss 1938 show plans. W. A. Natorp is president and Edward A. Smith is secretary and treasurer.

Mr. Smith occupies the offices of secretary and treasurer also in the Greater Cincinnati Nurserymen's Association and also in the Cincinnati Landscape Association. The president of the former is Robert Dubois and the vice-president, Elmer Heitmeyer. The president of the Cincinnati Landscape Association is Peter Cassinelli and the vice-president, Robert Dubois.

CALIFORNIA TRADE ACTIVITIES.

A discussion of the coming state convention at Oakland was part of the business of the dinner meeting of the Central California Nurserymen's Association held at Burlingame, January 14. A report from members of the committee was also given on the proposed amendments to the bill governing grades and standards to be presented at the present session of the state legislature. John McConiff, La Fayette, Cal., was elected to membership in the association.

Members of the board of control of the California Association of Nurserymen met at Sacramento last week to discuss how to put in legislative form the changes which are desired. It is

planned to change the present code to define the duties of nursery service more specifically and also to change the wording of the present code so that the present license fee be applicable to the "owner and operator" and not just "operator." Those present who met with A. A. Brock, California state agricultural director; J. D. Meriwether, chief of nursery service of the California department of agriculture, and Mr. Jacobsen, legal adviser of the department, were: R. D. Hartman, San Jose; George C. Roeding, Jr., Niles; J. R. Crombie, Berkeley; Toichi Domoto, Hayward; Roy F. Wilcox, Montebello; J. A. Armstrong, Ontario; H. A. Marx, Los Angeles, and Harold McFadden, Compton.

NORTH JERSEY METROPOLITAN.

At the meeting of the North Jersey Metropolitan Association of Nurserymen held at the Passaic county courthouse, January 13, the first issue of the monthly letter, a 4-page printed circular, was finally launched and met with the approval of the association. It was felt this letter not only promotes business, but will furnish another way to contact the public in legislative matters favorable to horticulture. A motion was made to make the present temporary publishing committee permanent. The entire association membership is asked to write material that is timely and of educational value for the letter. Eight members have been appointed to be responsible for written material each month. This material is turned over to a committee of three, who will censor and condense this material so that it will be instructive and pleasant to read.

The entertainment committee reported that ladies' night will be held in February. The secretary will notify the members about the final plans. The catalogue committee reported the progress it is making and requested the members to send in constructive suggestions they would like in the catalogue.

Considerable discussion prevailed on the plant patent law and the patenting of foreign varieties, instead of patenting material originating in the United States. The president finally appointed a committee of two to study this law and contact their Congressmen and Senators for information as to how this law can be amended.

The library committee requested the members to submit a list of books they wish the committee to buy.

The officers of the association this year are as follows: President, C. Hess, Mountain View; vice-president, C. A. Kievit, Hawthorne; secretary, William Halliey, Clifton; treasurer, H. Deverman, Clifton; executive committee, R. Waidmann, Fort Lee; E. Zegers, Mountain View; Samuel Blair, Nutley; M. Snel, Hackensack; G. Grootendorst, Oakland, and H. Deverman, Clifton.

LAST month the board of trustees of the Chico, Cal., elementary schools awarded the contract for landscaping the grounds of the recently completed school on Citrus street to the Hieok Nursery, of Sacramento, Cal., on its low bid of \$229. The board also accepted the landscape plan drawn and prepared by Irving D. Hieok, owner of the Hieok Nursery. During the past year the Hieok Nursery has landscaped five of the best homes recently built at Redding, Cal., and starts another job this month.

CHINESE ELM

ULMUS PUMILA (Northern Strain)
Hardy Northern Type—Mature stock, power dug.

Immediate or later shipment.

Write for prices.

COLORADO SPRUCE TREES

Nursery grown, 4 to 6-ft. sizes.
Also transplants.

TOLLESON NURSERIES

Denver, Colo.

SPECIAL**Plum Tree Offer**

Varieties: Santa Rosa, Burbank, Methley Bruce, Shiro, Munson and Excelsior. Budded on Plum roots.

3 to 4 ft., 13c
4 to 5 ft., 15c
5 to 6 ft., 18c

F.o.b. the nursery.

BEVERLY HILLS NURSERY

Route 8, Box 164 San Antonio, Tex.

LINING-OUT STOCK

First class in every respect.

Here are a few items selected from the list we have to offer: Per 100
Red-Leaved Barberry, 2-year, 9 to 12 ins. \$3.00
Hydrangea P. G., 6 to 15 ins. 4.00
Spiraea Vanhouttei, 12 to 18 ins. 2.00
Boston Ivy, fine seedlings 2.50
American Bittersweet, fine plants 3.00
Bench grafts, very nice stock.
Fench Lilacs, on privet 5.00
Huge Koster, single, dark purple red
Pros. Grey, double, porcelain blue
Charles X, single, violet
Mme. Legraye, single, white
Flowering Crabs, on whole roots 5.00
Bechtel's, double, pink
Floribunda, single, carmine
Neidwetzkyana, red flowers, fruit and foliage
Order now. Packed free for cash.

HARMON NURSERY Prospect, Ohio

JEWELL Wholesale

Hardy Minnesota-grown
Nursery Stock and Liners

THE JEWELL NURSERY CO.

POUCH N
Lake City, Minnesota

**GRAPEVINES,
PEACH AND SHADE TREES,
BLACKBERRIES,
SHRUBS**

WILLOWBEND NURSERY

PERRY, OHIO

Asparagus Roots

We offer to the trade one of the largest plantings of 1 and 2-year roots in the east. Write us for prices.

E. W. TOWNSEND & SONS NURSERIES

Sallisbury, Maryland

NO PEACH MOSAIC BAN.

The Secretary of Agriculture announced January 21 that the Department of Agriculture will not act at this time to restrict the interstate movement of host plants of the peach mosaic disease, which is known to occur in parts of Arizona, California, Colorado, New Mexico, Texas and Utah.

This announcement is made as a result of careful consideration of the evidence submitted at the public hearing, September 21, at Albuquerque, N. M., which was attended by federal government and state officials and by nurserymen, orchardists and others interested in peach production in the affected states.

In making this decision consideration was given to the fact that co-operative federal-state inspection and eradication are under way in all infected areas, and it is believed that, at present, the prevention of spread of the disease can be handled satisfactorily through state regulatory action.

JAPANESE GOOD-WILL OFFERING.

The Princeton Nurseries, Princeton, N. J., played a part in the good-will offering of 5,000 plants and trees sent recently from New Jersey to Japan. Members of the Garden Club of America, moved by the hospitality shown by Prince Tokuzawa during their visit in Japan last year, decided on the gift as a token of peace and friendship.

The plants and trees left December 29 in a refrigerator car from a Kingston, N. J., siding for Vancouver, B. C. From there they were expected to be shipped on a freighter sailing January 13, in space provided by the Japanese imperial government.

William Flemer, Jr., president of the nurseries, explained that thirty employees were engaged one entire week in just selecting, packing and loading the shipment on the refrigerator car. Among the 5,000 plants and trees, which cost \$5,000, are fifty pin oaks, unknown at the present time in Japan; 3,000 white-flowering dogwood, 1,000 pink-flowering dogwood, twenty-five weeping white dogwood, 500 magnolias, twenty-five sweet gum trees and fifty rhododendrons.

THE Durant Nursery Co., Durant, Okla., is having the biggest trade in its history, according to J. T. Foote, manager.

THE Haas Home Nursery, Terre Haute, Ind., was chosen to landscape a model colonial home, open for public inspection the week of January 11.

NEW buildings and fences have been erected at E. R. Easley's Nursery, Santa Cruz, Cal. The Santa Cruz Sentinel recently carried a double-column story about this nursery.

THE Texas Nursery Co., Sherman, Tex., has been awarded the contract to landscape a \$1,000,000 federal low-cost housing project at North Dallas. The contract was awarded on a bid of \$23,357.50.

AFTER completing a course in agriculture at the University of California, Berkeley, Thomas Ames has opened a nursery on San Pablo avenue, Berkeley. He is planning to erect an office and greenhouses soon.

MILTON NURSERY CO.

Milton, Oregon

Growers General Nursery Stock

Birch: Cut-leaf Weeping, 7 to 8 ft. and 8 to 9 ft. European White, specimens all grades; clumps, branched at ground.

Chinese Elm: Seedlings and transplanted branched stock.

Locust, Globe-head, rapid grower.

Maples: Norway, Schwedler, Soft, Sugar, Sycamore, whips and branched. Globe Norway, top-grafted.

Fruit Tree Seedlings.

Car lot accommodations for eastern points.

YOUR WANT LIST APPRECIATED

A. MCGILL & SON

FAIRVIEW, OREGON

Wholesale Only

Our usual line of quality nursery stock, including Shade and Flowering Ornamental Trees and Specialties, Fruit Tree Seedlings and Roses.

Grown Right and Packed Right

A card will bring our list of items that will make you some money.

CHINESE ELM SEEDLINGS

Thoroughly matured, splendidly rooted stock for immediate shipment if desired.

CHINESE ELM SEED

True, hardy, North China strain.

Our seed and seedlings come from North China strain trees which have stood temperatures of lower than 30 below zero here.

Take no chances. Plant our hardy seed and seedlings.

WASHINGTON NURSERIES

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ORENCO NURSERY CO.

Orengo, Oregon

Wholesale Growers

Fruit, Shade, Flowering Ornamental Trees, Fruit-tree Seedlings, Roses, Etc.

Very complete line of quality stock

**EVERGREENS**

For Seventy years growers of Quality Evergreens Lining Out Stock a Specialty Write for Trade List

EVERGREEN NURSERY CO.
Established 1864 : STURGEON BAY, WIS.

HILL'S EVERGREENS

Complete assortment of lining-out sizes Also larger grades for landscaping Send for our wholesale catalogue

D. HILL NURSERY CO.

EVERGREEN SPECIALISTS
Largest Growers in America
Box 402 DUNDEE, ILLINOIS

NEW PLANT PATENTS.

From the patent law offices of Rummel, Rummel & Woodworth, Chicago, comes report of the following new plant patents, issued in the past three months:

No. 204. White chrysanthemum. Clarence C. Mayhew, Sherman, Tex., assignor to the Texas Nursery Co., Sherman, Tex. A new and distinct variety of chrysanthemum plant characterized by its polyanthus and mound-like habit of growth, its early blooming habit and the white color of its flower.

No. 205. Bronze chrysanthemum. Clarence C. Mayhew, Sherman, Tex., assignor to the Texas Nursery Co., Sherman, Tex. A new and distinct variety of chrysanthemum plant characterized by its polyanthus and mound-like habit of growth, its early blooming habit and the bronze color of its flower.

No. 206. Buddleia. Paul Schmidt, Youngstown, O. A buddleia distinguished by rich, heavy, dark green foliage, a great abundance of flower panicles or bloom heads normally larger and having more circularity than the bloom heads of either of the parent buddleia, panicles of a lilac color and characteristics making it more suitable for use as a cut flower.

No. 207. Hybrid poplar. Ralph H. McKee, New York. A new and distinct variety of poplar characterized particularly by its rapid growth in height and diameter, its resistance to disease, its ready propagation from cuttings and its average fiber length of about 0.66 millimeter in one-year-old trees.

No. 208. Rose. Jesse F. Hiscox, East Patuxent, N. J. A variety of rose plant characterized particularly by its distinctive color of bud and bloom; its strong and pleasant fragrance; its vigorous growth, and its long, strong stems.

No. 209. Rose. George E. Lukens, North Wales, Pa., assignor to the Florex Gardens, North Wales, Pa. A variety of rose characterized particularly by the distinct color of its large fragrant bloom, its excellent keeping qualities, its vigorous growth and abundance of rich foliage and its long, strong stems.

No. 210. Sugar cane. Benjamin Arthur Bourne, Clewiston, Fla. A variety of sugar cane characterized particularly by its early maturity, resistance to certain leaf diseases, high sugar content, distinctive color and shape of stalk and bud, distinctive pattern of stem epidermis and strong, upright growth, formed by straight stalks of fairly large diameter.

No. 211. Hybrid poplar. Ralph H. McKee, New York. A new and distinct variety of poplar as described in the application characterized particularly by its superior size and form, its few branches, its dark green infantile leaves, its average fiber length of 0.68 mm. in one-year-old trees, its resistance to disease and its thirty-eight chromosomes.

No. 212. Hybrid poplar. Ralph H. McKee, New York. A new and distinct variety of poplar characterized particularly by its superior size and form, its rapid growth in height and diameter, its large proportion of the wood in the bole, its average fiber length of 0.66 mm. in one-year-old trees and its resistance to disease.

No. 213. Hybrid poplar. Ralph H. McKee, New York. A new and distinct variety of poplar characterized particularly by its superior size and form, its dark yellow green infantile leaves, its average fiber length of about 0.70 mm. in one-year-old trees and its resistance to disease.

No. 214. Hybrid poplar. Ralph H. McKee, New York. A new and distinct variety of poplar characterized by its superior size and form, its fiber length being greater than that of either of its parents in trees of the same age, its resistance to disease, its thirty-eight chromosomes and its dark green infantile leaves.

No. 215. Hybrid poplar. Ralph H. McKee, New York. A new and distinct variety of poplar characterized particularly by its rapid growth in height and diameter, its resistance to disease, its thirty-eight chromosomes, its long fiber and its superior size and form.

No. 216. Hybrid poplar. Ralph H. McKee, New York. A new and distinct variety of poplar characterized particularly by its superior size and form, its fiber length being greater than that of either of its parents at the same age, its rapid growth in height and diameter, its resistance to disease and its dark green infantile leaves.

No. 217. Hybrid poplar. Ralph H. McKee, New York. A new and distinct variety of poplar characterized particularly by its rapid growth, its hardness, its upright form with little branching and its resistance to disease.

No. 218. Hybrid poplar. Ralph H. McKee, New York. A new and distinct variety of poplar characterized particularly by its exceptionally small leaves, its rapid growth, its dense wood, its average fiber length of about 0.82 mm. in one-year-old trees and its resistance to disease.

No. 219. Carnation. Adolphe Frederick Jacob Baur, Indianapolis, Ind., assignor to Baur-Steinkamp & Co., Indianapolis. A variety of fragrant, medium pink carnation characterized particularly by its large flowers of distinctive coloring, its vigorous growth, its free and steady blooming, its strong stems and its strong nonsplitting calyx.

No. 220. Sugar cane. Benjamin Arthur Bourne, Clewiston, Fla. A variety of sugar cane characterized particularly by its resistance and immunity to certain diseases, high tonnage of cane, moderate earliness, distinctive color and shape of stalk and bud, distinctive pattern of stem epidermis, large diameter and solid, heavy stalks.

No. 221. Lobelia. Esther C. Johnson, La Mesa, Cal. A new and distinct variety of lobelia characterized particularly by its double, flat rosette form of flower of ultramarine blue, with five linear sepals acutely pointed, and the compact and perennial plant.

No. 222. Rose. Kellar Carbaugh, Lower Yoder township, Cambria county, Pa., assignor to Johnstown Greenhouses, Inc., Johnstown, Pa. A new and distinctive variety of rose plant characterized by the large size of its foliage, the size and length of its stem, the distinctive coloring of both its bud and bloom, its large size of bloom, its great fragrance, its many petals and its lasting quality as a cut flower.

No. 223. Rose. Alexander Dickson, Jr., Newtownards, near Belfast, Ireland, assignor to Henry A. Dreer, Inc., Philadelphia. A new and distinct variety of rose plant characterized particularly by the distinctive dark red coloring and peony-like form of its fall blooms, in combination with its vigorous growth and free-blooming habits.

No. 224. Camellia. Edward A. McIlhenny, Avery Island, La. A new and distinct variety of Camellia japonica characterized as to novelty by the unusual size and the distinctive color of its bud and bloom (deep red with purple overcast).

No. 225. Hybrid poplar. Ralph H. McKee, New York, assignor to McKee Poplar Forestation, Inc., New York. A hybrid poplar characterized by its rapid rate of growth, its great fiber length, its large leaves, its disease resistance and its ability to thrive and maintain substantially its maximum rate of growth in the absence of fertilizer.

No. 226. Hybrid poplar. Ralph H. McKee, New York, assignor to McKee Poplar Forestation, Inc., New York. A new and distinct variety of poplar characterized particularly by its rapid growth, its hardness, its large leaves and its resistance to disease.

BULLETINS RECEIVED.

"Sterility in Pears," by M. B. Cummings, E. W. Jenkins and R. G. Dunning, issued as bulletin 408 of the Vermont agricultural experiment station, deals with the causes and conditions of sterility among pears, with special reference to members of the Bartlett group, comprising thirteen varieties. Sterility of the Bartlett pear is not constant, but varies somewhat with season and location. Moreover, this variety is not absolutely self-sterile under all conditions, since an occasional fruit sets its own pollen, but seed formation, indicating fertility, is rare. When seeds are formed, they are often nongerminable. Fruit setting is more common than seed setting.

"Dutch Elm Disease," by G. P. Clinton and Florence A. McCormick, published as bulletin 389 of the Connecticut agricultural experiment station, is the most complete study of this disease yet seen. It contains a history of this disease, Graphium ulmi, in Europe and its history in the United States and specifically in Connecticut. A complete bibliography and eight pages of plates, each containing from two to twelve pictures, add to its value.

Contributions from Boyce Thompson Institute, volume 8, No. 4, is particularly interesting for the article by Florence Flemion, on "A Rapid Method for Determining the Germinative Power of Peach Seeds." The summary states: "If both the pericarp and the inner seed coat are removed and the naked embryos mixed with moist granulated peat moss at room temperature a test of the germination capacity of dormant peach seeds can be obtained in ten days. The percentage germination thus obtained agrees well with that obtained when the seeds are after-ripened at 5 degrees to 10 degrees centigrade for the germination test. This method requires no special equipment and can be carried out readily under commercial conditions."

Proceedings of the Twelfth National Shade Tree Conference, at Boston, Mass., September, 1936, are interesting for a number of reports on tree insects and diseases, fertilization experiments

and the like. The volume has the additional recommendation of having been edited by L. C. Chadwick. The secretary is Dr. Richard P. White, New Jersey agricultural experiment station, New Brunswick, N. J.

"Groups of Plants Valuable for Wildlife Utilization and Erosion Control," by W. L. McAtee, issued as circular 412 by the United States Department of Agriculture, contains twelve pages of information about plants of various types that are utilized by wild life and especially those that have been recommended for soil-erosion control.

"Sand Culture of Seedlings," by A. A. Dunlap, issued as bulletin 380 by the Connecticut agricultural experiment station, discusses the use of sand as a method to control damping-off and gives directions as to the practical use of this method.

OBITUARY.

Elliott Peterson.

On his first trip east with E. M. Dering, business manager of Peterson & Dering, Inc., Scappoose, Ore., Elliott Peterson, nursery manager, became ill in Kansas City, Mo. Mr. Dering proceeded with him to Omaha, Neb., where, after apparently recovering, he was suddenly stricken with double pneumonia, and Mrs. Peterson was hurriedly summoned. He died after six days' illness.

Born in Portland, Ore., in 1904, Mr. Peterson began learning the nursery business when only a small boy. A partnership with Mr. Dering was formed in 1924, and five years ago the firm moved its nursery from Portland to Scappoose, where a warehouse and cellar equipped with all modern facilities were built. The production of field-grown roses, under Mr. Peterson's supervision, was increased yearly until at present the firm employs twenty-five to fifty men to handle the large crop.

Surviving besides his widow is a brother, Andrew C. Peterson, Portland. Funeral services were held January 21 in Portland, with interment in the Rose City cemetery there.



Elliott Peterson.

TAXUS CUSPIDATA CAPITATA

We have a fine stock of plants for hedging or specimens, which will make a good showing immediately. Sizes, 2 to 8 ft.

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Tsuga Canadensis

Sizes, 5 to 6 ft. and 6 to 7 ft.

Tsuga Caroliniana

Sizes, 5 to 6 ft. and 6 to 7 ft.

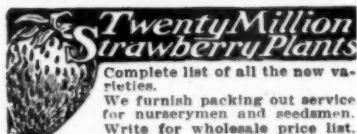
Both choice offerings, quickly growing into serviceable hedges.

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FREDONIA, NEW YORK

CATALOGUES RECEIVED.

[In writing for a copy of any of the catalogues reviewed below, please mention that you saw it described in *The American Nurseryman*.]

Upton Gardens, Colorado Springs, Colo.—A folder on stiff paper listing tested seeds of evergreens, shrubs and perennials, all Colorado-grown.

D. Hill Nursery Co., Dundee, Ill.—Wholesale price list for spring, 1937, of "Hill's Evergreens." Alphabetized list of lining-out and balled and burlapped evergreens, plus a short listing of deciduous material. "Hill's Book of Evergreens" is mentioned.

The Cole Nursery Co., Painesville, O.—Illustrated booklet devoted exclusively to the Truehedge Columberry, *Berberis Thunbergii* pluriflora erecta, patented by Cole's. The shrub is erect, so that a planting requires but a minimum of trimming for a hedge. Truehedge Columberry is said to be hardy and rust-immune.

Kallman's Garden Nursery, Santa Barbara, Cal.—Called "News," the Kallman catalogue for fall, 1936—spring, 1937, offers roses, including new and rare varieties; bulbs, lawn grasses, flowering fruit trees, chrysanthemums, dahlias, flower and vegetable seeds and various supplies and tools. Cultural notes are given on different kinds of plants, and there is a planting calendar for the Santa Barbara region.

Henry A. Dreer, Philadelphia.—Bound in bright blue paper, "Dreer's Garden Book—1936" contains 185 numbered pages and an index of two and one-half pages. The multiplicity of stock listed includes flower seeds, novelty, specialty and ordinary, the last-named being labeled "Reliable;" vegetable seeds ("Reliable"), flowering plants, water lilies and other aquatics, succulents, cannas, gladioli and other summer-flowering bulbs, dahlias, perennial plants, small fruits, hardy shrubs, hardy climbing plants, roses, "showy flowering and foliage plants," ferns and palms. Growers' supplies and tools, insecticides and fungicides and fertilizers are also handled. Among the new flowers are peony-flowered asters and the rustproof snapdragons. There are numerous illustrations, several pages being shown in full color.

Bristol Nurseries, Inc., Bristol, Conn.—Offering cuttings and pot plants of Bristol chrysanthemums exclusively, chiefly Korean hybrids, a 6-page folder pictures in color and lists a number of new varieties. Among them are The Moor, King Midas and Ember, double Korean hybrids; single Koreans, and Mrs. Mary Hooker, a greenhouse pompon.

Howard M. Gillet, New Lebanon, N. Y.—Containing at least one illustration to a page, "1937 Book of Flowers," a pocket-size catalogue with thirty-two pages, devotes sixteen of them to gladioli, dahlias, phlox, peonies, lilies and various lilies, also a few perennials and some nursery stock, with Dutch bulbs, are handled.

W. N. Scarff's Sons, New Carlisle, O.—Farm products, including fruit stock and field seeds; ornamental trees and shrubs, and perennial plants, also roses, are offered in the 1937 issue of the Scarff catalogue, which has a front cover in colors of a young woman with a crate of strawberries and a back cover showing a farmer among a planting of field corn.

Curtis Nurseries, Callicoon, N. Y.—In a 12-page catalogue, "1937 Native Trees and Shrubs" is introduced a Canadian hemlock for hedges, Rhododendrons, including some azaleas; kalmias, hardy deciduous trees and shrubs, fern clumps and wild flower plants are also listed. Some of the stock is collected, and some nursery-grown. There are illustrations and a map of the region about Callicoon.

Southern Bulb Farms, North, S. C.—A pocket-size catalogue listing, chiefly, dahlias, but also gladioli, cannas, lilies, peonies, roses, camellias, azaleas and fruit trees. The proprietor is A. T. Livingston, whose photograph is reproduced on page 1, with "Greetings to Flower Lovers."

R. Lacy Nursery, Longview, Tex.—Folder with fine colored pictures, offering roses only, the varieties listed as to color of bloom. Besides the named lists, there are collections of fifty and 100 bushes.

Storrs & Harrison Co., Painesville, O.—With covers and several pages of flowers in natural colors, the spring, 1937, catalogue is also liberally illustrated in black and white. Vegetable and grass seeds, plus garden supplies and books, occupy the first section, followed by flower seeds, perennial plants, house and bedding plants and annuals, bulbs and tubers, roses, hardy shrubs and trees, evergreens and, lastly, fruit stock. The booklet is indexed.

The Conard-Fyle Co., West Grove, Pa.—Five pages of rose novelties from this country and elsewhere open "Star Roses, Spring, 1937," eleven of the new roses being illustrated in colors. Then follow sixty-four standard varieties, the "Star Dozen," a collection, and polyanthas, climbing and hybrid perpetual types. Perennials are listed, specially two pages of hardy chrysanthemums. All the pictures but one, showing a home rose garden, are colored.

Rez. D. Pearce, Merchantville, N. J.—Wood blocks of Iris dichotoma and of hymenocallis and camassia decorate the covers of "Seeds of Rare Plants," containing sixty-six pages of lists of unusual stock. There are a few small black and white illustrations. "The Treasure Chest" is an alphabetized list of forty-six pages of uncommon old and new varieties, followed by "General Seed Offer," which briefly lists seeds of plants from abies to vyetilia; finding lists, and a special grouping of bulbous flowers for spring planting.

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See this beautifully-illustrated new book, answering every question about Evergreens. Produced by America's leading Evergreen Nursery with a background of 40 years' experience with Evergreens. A cloth bound book, 7x9½", containing 320 pages. There are 50 chapters, including complete information on uses, descriptions, propagation, historical and cultural information pertaining to Evergreens. 360 illustrations, 45 in full color. Price \$4.50, postpaid, anywhere in the United States. Sent with full privilege of approval.

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- 20,000 CHERRY, Montmorency and Early Richmond, 2-year, XX and 1½ inch.
- 5,000 SPIREA, Vanhouttei, 3 to 4 feet and 4 to 5 feet.
- 25,000 ELMS, American, Vase and Mo-line, transplanted, up to 4 inches.
- 10,000 MAPLE, Norway, transplanted up to 2½ inches.
- 3,000 ARBOR-VITAE, Pyramidals, up to 8 feet.
- 400 PINE, Mugho, from 2 to 4 feet.
- 1,000 SPRUCE, Norway, sheared, none better, 2 to 5 feet.
- 600 JUNIPER, Pillar's, 5 to 8 feet spread, beautiful.
- 3,000 ARBOR-VITAE, American, and RETINOSPORA, 4 to 7 feet.

Send for list on many other items.

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Evergreens, Shrubs,
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Amor River North Privet Cuttings

Let us make up your cuttings from our tried and proved "Mother Blocks." Genuine hardy Amor River North Privet. Special cash-with-order price for February, \$1.50 per 1000, \$5.00 per 5000. Packing free. Order at once.

Alta Vista Nurseries, Davenport, Iowa

Virginia Crab Scions

100 for \$5.00. Standard.

Jensen's Nursery, Ames, Iowa

OAK TREES WANTED

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ROSE REGISTRATIONS.

The American Rose Society's registration committee has approved applications for registration of the following roses. Notice of these registrations has been sent to rose organizations in foreign countries and trade papers.

If no objections are raised before March 10, 1937, the registration of these names will become permanent as of that date:

Climbing Heinrich Wendland. Climbing hybrid tea. Discovered by L. H. Stett, Tyler, Tex. A sport of Heinrich Wendland, with flowers like those of the parent, except that the color is a little richer. The plants are said to make 10-foot canes per season and to be moderate, intermittent bloomers from May until November.

Climbing Federico Casas. Climbing hybrid tea. Discovered by L. H. Stett, Tyler, Tex. Said to be a sport of Federico Casas, with flowers like those of the parent, and a vigorous climbing plant which blooms freely.

Good Luck. Hybrid tea. Discovered by Jesse F. Hiseox, East Patchogue, N. Y. Said to be a sport of Joanna Hill, with high-centered, full flowers, four and one-half to five and one-half inches in diameter, having twenty to twenty-five petals. The outside of the petals is rose-red with a gold base, and the inside is buff. Strong, but pleasing fragrance. An abundant bloomer, with the flowers borne singly. Plant is said to be vigorous and upright in habit, with dark, cross-grown foliage. A continuous bloomer.

Golden Queen. Hybrid tea. Originated by C. Chaudron, Parilly-Venissieux, France. To be introduced by the Jackson & Perkins Co., Newark, N. Y. Claimed to be a seedling of two unnamed seedlings of Druschki parentage. The flower is described as globular, with an informal center; four to four and one-half inches in diameter, with about fifty petals. The color of the bloom is pure gold yellow. It has a mild fragrance, and the flowers are borne singly. The plant is described as not so disorderly in habit as Frau Karl Druschki, but stronger than the average hybrid tea. It is said to be a continuous bloomer from June until November.

Yellow Signora. Hybrid tea. Discovered by the Jackson & Perkins Co., Newark, N. Y.; to be introduced by it. Said to be a sport of Signora. The plant and flower are described as exactly the same as those of the parent, except that the color of the bloom is pure straw-yellow.

Golden Signora. Hybrid tea. Discovered by Jackson & Perkins Co., Newark, N. Y.; to be introduced by it. Said to be a sport of Signora, with plant and bloom exactly like those of the parent, except that the color of the flower is rich golden yellow.

Stargold. Hybrid tea. Originated by Walter D. Brownell, Little Compton, R. I., and introduced by the Interstate Nurseries, Hamburg, Ia. Said to be a seedling of a self-seedling of Mary Wallace x unnamed seedling x unnamed seedling. Flower is described as of medium size, high-centered, three and one-half to five inches in diameter, with twenty-seven to thirty-five petals. Color is lemon to canary to gold to saffron. Has a fragrance of China tea and wickuriana. Flowers are borne singly and together, freely when established. The flower is described as similar in form to La France. It is claimed to be a new color in yellow roses, being perhaps nearer spectrum-yellow than other hybrid tea roses. Plant is described as three or four feet to higher, compact, branching, ascending. A profuse bloomer, continuous, when established, from June to November.

R. Marion Hutton, Sec'y.

CLASSIFIED ADVERTISING

Hemlock, 8 to 12 ft. high. Honey Locust and Oak. **Elmgrove Nursery, Leesville, Mich.**

Thousands of shade trees, shrubs, peonies. Special prices on lots to nurserymen.

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R. J. Braden, Gray, Me.

My new Seed List has been posted to customers. Copies are still available for those interested.

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American Arbor-Vitae.

Seedlings, 4 to 8 ins., \$10.00 per 1000, 50 and up at thousand rate. Liberal discounts in lots of 5000 and up. No extra charge for baling or containers. Write

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Buyers of Rhododendrons, Kalmias, Azaleas, Leucothoas, Perennials and Ferns, in clumps, seedlings and planting stock, write for my price list before you buy and save on first-class material.

A. J. Greene, Pineola, N. C.

Phlox subulata, or **Thrift**; a good seller; hardy, field-grown, rooted lining-out divisions; excellent stock: **Rosea**, **Lilacina**, \$1.50 per 100, postpaid; \$6.00 per 1000, express collect. 250 at 1000 rate; **Rosea**, heavy clumps, \$4.00 per 100, 25 at 100 rate. Satisfaction guaranteed. **Riegel Plant Co., Experiment, Ga.**

MINNESOTA NURSERY TRENDS.

From the office of the state entomologist, St. Paul, Minn., comes a reminder of the importance of culling out any plant material which shows the least sign of disease and of taking care when grading for size. This, of course, refers to work now going on in the storage cellars. One of the best indications of business conditions is the transit inspections, which reveal that nursery stock movement has been considerably heavier this fall than it was a year ago. Rather surprising, too, is the fact that most of the movements of stock have been for the retail trade.

In spite of the fact that large tree shipments have been pretty well out of the picture during the past five or six years, this season, shipments of large trees have increased considerably. This would appear to be as good an indication of business trends as one could wish to see.

Some interesting figures have been compiled by the office staff of Prof. A. G. Ruggles, state entomologist, on the trend of nurseries, as it is called. There has been a reduction in the number of certified general nurseries from that of last year; in 1935 the number, to be exact, was just eight more than were registered this year. On the other hand, the number of dealers handling stock in Minnesota has increased to twenty more than that of 1935. The state entomologist considers the figures interesting, although the trend and figures may vary another year. Another change has been noted in the number of registered nurseries handling what is described as specialized plant material, such as evergreens or perennials, etc. Here, too, there has been a decrease, but it is much smaller than in the other groups which have been studied. The study of the trend in nurseries for the past ten years promised by the head of the department will certainly prove of much interest as well as profit to nurserymen.

NEW BUNCH-TYING MACHINE.

In addition to the machines previously employed by nurserymen, the Felins Tying Machine Co., Milwaukee, Wis., is now manufacturing a small foot-power bunch-tyer, equipped with dual ball and roller bearings, to tie 16-ply cotton twine and 1/4-inch wide tape, especially for nurseries.

THE business founded by the late Carl Gerlach, landscape gardener at Milwaukee, Wis., will be continued as the Carl Gerlach Co., incorporation papers for which were issued December 1. Two sons of the founder, Charles and Edward, are president and secretary-treasurer of the firm respectively; Walter R. Remond, former superintendent, is vice-president and general manager.

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